As filed with the Securities and Exchange Commission on October 9, 2015

Registration No. 333-

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

WAVE LIFE SCIENCES PTE. LTD.*

(Exact name of registrant as specified in its charter)

Singapore	**2834**	**Not applicable**
(State or other jurisdiction of incorporation or organization)	*(Primary Standard Industrial Classification Code Number)*	*(I.R.S. Employer Identification No.)*

8 Cross Street #10-00
PWC Building
Singapore 048424
+65 6236 7389

(Address, including zip code and telephone number, including area code, of registrant's principal executive offices)

CT Corporation
155 Federal Street, Suite 700
Boston, MA 02110
(617) 757-6400

(Name, address, including zip code and telephone number, including area code, of agent for service)

Copies of all communications, including communications sent to agent for service, should be sent to:

William C. Hicks	**Frank F. Rahmani**
Matthew J. Gardella	**Nicole Brookshire**
Linda Rockett	**John T. McKenna**
Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.	**Cooley LLP**
One Financial Center	**500 Boylston Street**
Boston, MA 02111	**Boston, MA 02116**
(617) 542-6000	**(617) 937-2300**

Approximate date of commencement of proposed sale to the public: As soon as practicable after this Registration Statement becomes effective.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act, check the following box. ☐

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act (Check one):

Large accelerated filer ☐	Accelerated filer ☐	Non-accelerated filer ☒ (Do not check if a smaller reporting company)	Smaller reporting company ☐

CALCULATION OF REGISTRATION FEE

TITLE OF EACH CLASS OF SECURITIES TO BE REGISTERED	PROPOSED MAXIMUM AGGREGATE OFFERING PRICE (1)(2)	AMOUNT OF REGISTRATION FEE
Ordinary Shares, no par value per share	$80,000,000	$8,056

(1) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended.
(2) Includes the offering price of additional ordinary shares that the underwriters have the option to purchase.

The registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until this Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

* Prior to the effective date of this Registration Statement, WAVE Life Sciences Pte. Ltd. will convert from a Singapore private limited company to a Singapore public limited company. Upon such conversion, the registrant will be known as WAVE Life Sciences Ltd.

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The information in this preliminary prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED OCTOBER 9, 2015

PRELIMINARY PROSPECTUS

Shares

Ordinary Shares

We are offering of our ordinary shares. This is our initial public offering and no public market currently exists for our ordinary shares. We expect the initial public offering price to be between $ and $ per share.

We have applied to list our ordinary shares on the NASDAQ Global Market under the symbol “WVE.”

We are an emerging growth company, as defined in the Jumpstart Our Business Startups Act of 2012 and, as such, will be subject to reduced public reporting requirements.

Investing in our ordinary shares involves risks. See the section titled “Risk Factors” beginning on page 13.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

	PER SHARE	TOTAL
Public offering price	$	$
Underwriting discounts and commissions (1)	$	$
Proceeds to WAVE Life Sciences Pte. Ltd., before expenses	$	$

(1) We refer you to the section titled “Underwriting” for additional information regarding underwriter compensation.

Certain of our existing shareholders and their affiliated entities, including affiliates of our directors, have indicated an interest in purchasing up to an aggregate of approximately $ million of our ordinary shares in this offering at the initial public offering price. However, because indications of interest are not binding agreements or commitments to purchase, the underwriters could determine to sell more, less or no shares to any of these existing shareholders and their affiliated entities and any of these existing shareholders and affiliated entities could determine to purchase more, less or no shares in this offering.

Delivery of the ordinary shares is expected to be made on or about , 2015. We have granted the underwriters an option for a period of 30 days to purchase up to an additional ordinary shares solely to cover over-allotments. If the underwriters exercise the option in full, the total underwriting discounts and commissions payable by us will be $, and the total proceeds to us, before expenses, will be $.

Joint Book-Running Managers

Jefferies **Leerink Partners**

Prospectus dated , 2015.

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You should rely only on the information contained in this prospectus and any free writing prospectus prepared by or on behalf of us or to which we have referred you. We have not and the underwriters have not authorized anyone to provide you with information that is different from that contained in such prospectuses. We are offering to sell our ordinary shares, and seeking offers to buy our ordinary shares, only in jurisdictions where such offers and sales are permitted. The information in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or any sale of our ordinary shares.

PROSPECTUS SUMMARY

The following is a summary of information discussed elsewhere in this prospectus, and does not contain all the details concerning our business, our ordinary shares or other information that you should consider in making your investment decision. See the section titled "Business" for more information, including a "Glossary of Scientific Terms" beginning on page 97. You should carefully review this entire prospectus, including the information set forth in the sections titled "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and the related notes, before making an investment decision. As used in this prospectus, unless the context otherwise indicates, references to "WAVE," the "company," "we," "our," "us" or similar terms refer to WAVE Life Sciences Pte. Ltd. and our wholly-owned subsidiaries. References in this prospectus to "S$" refer to Singapore dollars, "¥" refer to Japanese yen and "€" refer to the euro.

Our Company

Overview

We are a preclinical biopharmaceutical company with an innovative and proprietary synthetic chemistry drug development platform that we are using to design, develop and commercialize a broad pipeline of first-in-class or best-in-class nucleic acid therapeutic candidates. Nucleic acid therapeutics have the potential to address diseases that have been difficult to treat with small molecule drugs or biologics and have emerged as a large and promising class of drugs. We are initially developing nucleic acid therapeutics that target genetic defects to either reduce the expression of disease-promoting proteins or transform the production of dysfunctional mutant proteins into the production of functional proteins. Our platform is driven by our innovative and proprietary stereochemistry technology, enabling us to rationally design, optimize and manufacture stereopure nucleic acid therapeutics, which we believe possess drug properties that are superior to the stereoisomer mixtures of oligonucleotides currently on the market or in development by others. Building upon the innovative work of our scientific founders, Gregory L. Verdine, Ph.D. and Takeshi Wada, Ph.D., we have demonstrated the benefits of our stereopure nucleic acid therapeutics in preclinical studies. Our platform can be used to design therapies that utilize any of the major molecular mechanisms employed by nucleic acid therapeutics, including antisense, ribonucleic acid interference, or RNAi, exon skipping and others.

Our goal is to develop disease-modifying drugs for indications with a high degree of unmet medical need, in both orphan and broad diseases. We are initially focused on designing single-stranded nucleic acid therapeutics that can distribute broadly within the human body, allowing us to target diseases across multiple organ systems and tissues, through both systemic and local administration. Our most advanced therapeutic programs are in Huntington's disease, Duchenne muscular dystrophy, or DMD, and inflammatory bowel disease, or IBD. In Huntington's disease, we have programs targeting HTT SNP-1 and HTT SNP-2; in DMD, we are targeting Exon 51; and in IBD, we are targeting SMAD7. We have product candidates in our programs targeting HTT SNP-1 and Exon 51, and we expect to select lead candidates in our HTT SNP-2 and SMAD7 programs in late 2015 and early 2016, respectively. We also expect to file investigational new drug applications, or INDs, with the U.S. Food and Drug Administration, or FDA, for each of these candidates in 2016 and early 2017. We have late-stage discovery programs in epidermolysis bullosa simplex, in which we are targeting KRT14 SNP-1 and KRT14 SNP-2, and in DMD, in which we are focused on an additional DMD target, AcRIIb. We expect to identify lead candidates for these programs in 2016. We believe that, based on our initial selection criteria of novel and fast-follower opportunities, our platform can potentially be used in the near-term to design treatments for approximately 25 other potential target indications, mostly consisting of orphan indications, with an initial focus on orphan neuromuscular and central nervous system disease targets.

We believe that we have a strong intellectual property position relating to the development and commercialization of our stereopure nucleic acid therapeutics. Our intellectual property portfolio includes filings designed to protect stereopure oligonucleotide compositions generally, as well as filings designed to protect stereopure compositions of oligonucleotides with particular stereochemical patterns (for example, that

affect or confer biological activity). Our portfolio also includes filings on both methods and reagents that are designed to protect various features of the chemical methodologies that enable production of such stereopure oligonucleotide compositions. Our portfolio also includes filings designed to protect methods of using stereopure oligonucleotide compositions and filings designed to protect particular stereopure oligonucleotide products, such as those having a particular sequence, pattern of nucleoside or backbone modification, or both, pattern of backbone linkages and pattern of backbone chiral centers.

We believe that our technology provides us with a unique position in the therapeutic oligonucleotide marketplace. Due to prior or expected patent expirations and patent invalidations, we believe that a variety of useful and effective oligonucleotide chemistries, such as certain backbone and sugar modifications, that have been developed in the industry will be available to the public prior to when we expect our drugs will be commercialized. Therefore, we believe that we can readily incorporate these chemistries or other chemistries into our stereopure drugs. Moreover, our strategy does not require or rely on a particular chemistry or any particular nucleotide sequence, thus permitting us to navigate the intellectual property landscape in the field while developing our novel and proprietary oligonucleotide drugs.

Nucleic Acid Therapeutics

A majority of traditional therapeutic modalities, such as small molecule drugs and biologics, work by interacting with proteins that contribute to the disease. However, there are thought to be a limited number of “druggable” proteins; it is currently estimated that approximately 80% of human protein targets cannot be addressed by these conventional approaches. In contrast, directing medicines to the ribonucleic acid, or RNA, which is critical to the production of proteins, rather than to the proteins themselves, has the potential to significantly increase the number of druggable targets.

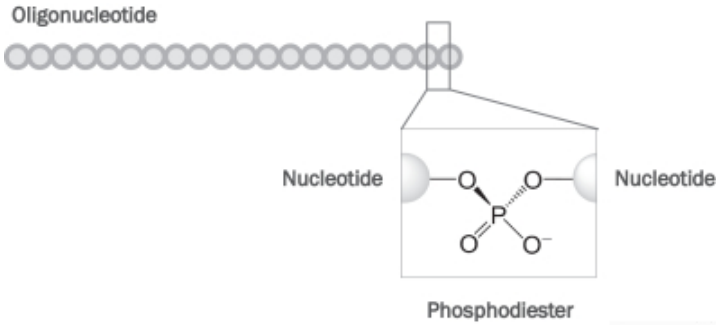
Nucleic acid therapeutics is a large and innovative class of drugs that can modulate the function of target RNAs to ultimately affect the production of disease-associated proteins. Nucleic acid therapeutics employ a number of different molecular mechanisms to regulate protein production. These mechanisms can be broadly categorized as those that promote degradation of the target RNA, including antisense and RNAi, and those that involve binding to the target RNA and modulating its function by promoting exon skipping, splice-correction and RNA-guided gene editing.

The unique capability of nucleic acid therapeutics to address a wide range of genomic targets across multiple therapeutic areas has the potential to create significant market opportunities to develop drugs to treat a broad spectrum of human diseases, including diseases where no medicines currently exist or for which existing treatments are suboptimal.

Design of Nucleic Acid Therapeutics

A large subset of nucleic acid therapeutics are comprised of chemically modified, short-length RNA or deoxyribonucleic acid, or DNA, strands, commonly known as oligonucleotides. Oligonucleotides are comprised of a sequence of nucleotides—the building blocks of RNA and DNA—that are linked together by a backbone of chemical bonds.

In nucleic acid molecules that have not been modified for therapeutic use, the nucleotides are linked by phosphodiester bonds, as shown below.



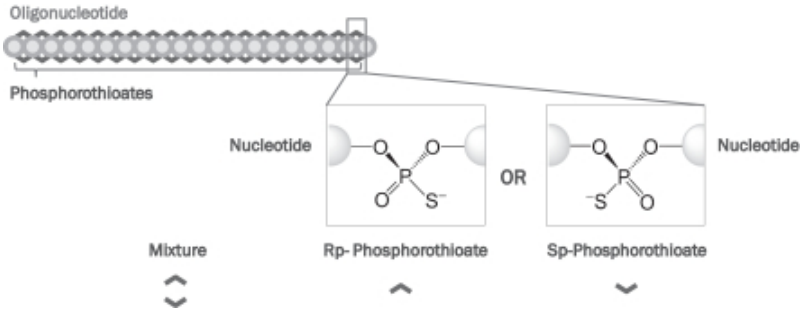
Such unmodified nucleic acid molecules are unsuitable for use as therapeutics because they are rapidly degraded by enzymes called nucleases that are widely present in the human body, are rapidly cleared by the kidneys and have poor uptake into targeted cells. The industry has employed chemical modifications of the nucleotides and phosphodiester bonds to improve the stability, biodistribution and cellular uptake of nucleic acid therapeutics.

Phosphorothioate, or PS, modification was one of the earliest and remains one of the most common backbone modifications used in nucleic acid therapeutics. In PS modification, one of the nonbridging oxygen (O) atoms bonded to a phosphorus (P) atom is replaced with a sulfur (S) atom. PS modification has been shown to improve the stability of oligonucleotides by making them less susceptible to enzymatic degradation. Further, PS bond-containing oligonucleotides often show increased binding to plasma proteins, which improves biodistribution by preventing rapid renal excretion of these molecules.

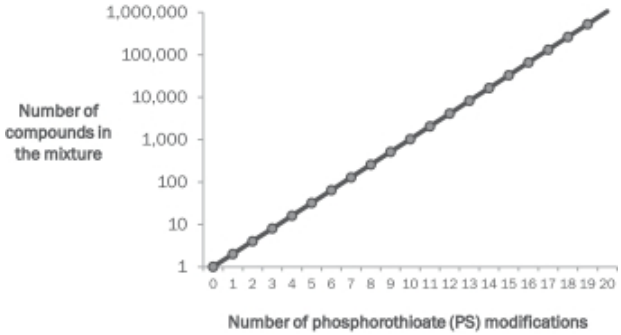
PS modification is accepted as state-of-the-art in the nucleic acid therapeutics field. The two nucleic acid therapeutics that have received regulatory approval, mipomersen and fomiversen, as well as a large majority of nucleic acid therapeutics currently in development, employ PS modification. We believe that PS modification will remain a critical component of this class of therapeutics.

PS Modification Results in Complex Drug Mixtures

A consequence of using PS modification in oligonucleotide synthesis is that it creates a chiral center at each phosphorus, each of which is designated as either an “Sp” or “Rp” configuration. This chirality creates stereoisomers, which, as shown below, have identical chemical composition but different three-dimensional arrangement of their atoms and consequently different chemical and biological properties.



The configuration of each PS modification occurs randomly during conventional nucleic acid synthesis. Because oligonucleotides are comprised of numerous nucleotides and associated PS modifications—with each PS modification having a random chiral configuration—the synthesis process generates an exponentially large number of stereoisomers of the synthesized oligonucleotide. Specifically, each linkage of an additional nucleotide residue doubles the number of stereoisomers of the product, so that a conventional preparation of a PS-containing oligonucleotide is in fact a highly heterogeneous mixtures of 2^N stereoisomers, where N represents the number of PS modifications. For instance, as shown below, a conventional fully PS-modified oligonucleotide (20 nucleotides in length, 19 PS modifications) in fact is a mixture of over 500,000 stereoisomers, each having the same nucleotide sequence but differing in the stereochemistry along their backbones.



Stereoisomers often possess different chemical and pharmacologic properties. For example, certain stereoisomers can drive the therapeutic effects of a drug while others can be less beneficial or can even contribute to undesirable side effects. The greater the variation among a drug's constituent stereoisomers, the greater the potential to diminish the drug's efficacy and safety.

Up until now, it has not been possible to create stereopure PS-modified nucleic acid therapeutics—meaning drugs comprised entirely of the same stereoisomer—because of an inability to specifically control the configuration of each chiral PS linkage during chemical synthesis. Moreover, because of the sheer number of stereoisomers present in a mixture, it would be impractical, if not impossible, to physically isolate the most therapeutically optimal stereoisomer from within a mixture. For these reasons, all of the PS-modified nucleic acid therapeutics currently on the market and in development by others are mixtures of many stereoisomers, which we believe are not optimized for stability, catalytic activity, efficacy or toxicity.

In small molecule therapeutics, U.S. regulators have long sought to eliminate the risks potentially posed by drug mixtures containing multiple stereoisomers. Since 1992, the FDA has recommended full molecular characterization of stereoisomers within small molecule drug mixtures. Historically, it has not been possible to achieve such characterization of nucleic acid therapeutic drug mixtures, which can contain tens of thousands to millions of distinct pharmacologic entities. We believe that our demonstrated ability to design and synthesize stereopure PS-modified nucleic acid therapeutics will set a new industry standard for the molecular characterization of complex nucleic acid therapeutic drug mixtures.

Our Solution: Controlling Stereochemistry in Nucleic Acid Therapeutics

We have developed proprietary technology that, for the first time, enables the development of PS-modified nucleic acid therapeutics in which stereochemistry is precisely controlled. This degree of control enables us to both rationally design and synthesize therapeutically optimized stereopure nucleic acid therapeutics.

We have discovered and continue to identify fundamental relationships between oligonucleotide stereochemistry and pharmacology, including stability, catalytic activity, specificity, safety and immunogenicity, which we believe have the potential to lead to improved efficacy and durability of effect. We have designed and synthesized stereopure PS-modified drugs that, when compared with their respective parent drug mixtures, possess superior stability or potency, or both, resulting in increased durability of effect, as well as specificity

and decreased immune activity. Therefore, we expect them to have improved safety profiles and to be dosed at lower concentrations or less frequently, or both, compared with mixture-based nucleic acid therapeutics. We are using these discoveries to guide our drug development activities.

Advantages of Our Approach

We believe that our innovative and proprietary synthetic chemistry drug development platform is a significant advance in the development of nucleic acid therapeutics. The advantages of our approach include:

- ***Ability to design drugs rationally with optimized pharmacological properties***. Our platform reduces susceptibility to enzymatic degradation and renal clearance and optimizes interactions with proteins that mediate activity as well as those that affect safety and tolerability. Our ability to improve pharmacologic stability and reduce clearance can enhance the biodistribution of single-stranded oligonucleotides to multiple tissues following systemic administration without the need for additional delivery technology.
- ***Broad applicability***. Our platform is applicable to multiple RNA-targeting approaches, including antisense, RNAi, exon-skipping, RNA-guided gene editing, microRNA and others, and is compatible with a broad range of chemical modifications and targeting moieties.
- ***Proprietary manufacturing of stereopure nucleic acid therapeutics***. We have significant experience producing PS-modified stereopure nucleic acid therapeutics and we believe we have the intellectual property position and know-how necessary to protect, advance and scale our manufacturing processes.

Proof of Concept of Our Technology

We have demonstrated in preclinical models, predictive of human biology, that direct relationships exist between stereochemistry and pharmacology, and that these relationships can be used to rationally design and construct nucleic acid therapeutics. In proof-of-concept studies, we examined diverse sets of oligonucleotides designed and synthesized using our platform, which allowed us to characterize and compare the behavior of various stereoisomers. These studies have demonstrated that by controlling stereochemistry, we can optimize multiple aspects of pharmacology, including stability, catalytic activity, specificity, safety and immunogenicity, which we believe have the potential to lead to improved efficacy and durability of effect. See “Business—Proof of Concept of Our Technology” for greater detail.

Our Strategy

We are leveraging our innovative platform to design, develop and commercialize optimized nucleic acid therapeutics that address important unmet medical needs. The key components of our strategy are as follows:

- ***Rapidly advance product candidates.*** We are initially focused on designing single-stranded nucleic acid therapeutics that can distribute broadly within the human body, allowing us to target diseases across multiple organ systems and tissues, through both systemic and local administration. Our most advanced therapeutic programs are in Huntington’s disease, DMD and IBD. In Huntington’s disease, we have programs targeting HTT SNP-1 and HTT SNP-2; in DMD, we are targeting Exon 51; and in IBD, we are targeting SMAD7. We have product candidates in our programs targeting HTT SNP-1 and Exon 51, and we expect to select lead candidates in our HTT SNP-2 and SMAD7 programs in late 2015 and early 2016, respectively. We expect to file INDs with the FDA for each of these candidates in 2016 and early 2017. We also have late-stage discovery programs in epidermolysis bullosa simplex, in which we are targeting KRT14 SNP-1 and KRT14 SNP-2, and in DMD, in which we are focused on an additional DMD target, AcRIIb. We expect to identify lead candidates for these programs in 2016.
- ***Expand our pipeline in the area of orphan diseases***. We intend to continue to expand our pipeline in the area of orphan diseases to provide multiple opportunities for clinical and commercial success and demonstrate the breadth of our abilities across multiple organ systems and tissues and therapeutic modalities. We believe that, based on our initial selection criteria of novel and fast-follower opportunities, our platform can potentially be used in the near-term to design treatments for approximately 25 other target indications, mostly consisting of orphan indications, with an initial focus on orphan neuromuscular and central nervous system disease targets.

- ***Establish opportunistic strategic partnerships***. We intend to collaborate selectively and opportunistically with pharmaceutical and biotechnology companies in the development and commercialization of nucleic acid therapeutics targeting certain orphan and broad indications. We expect to pursue such partnerships primarily when we believe they will significantly accelerate and enhance the clinical and commercial potential of a given development program.
- ***Leverage and expand our intellectual property portfolio***. We believe we have a strong intellectual property position relating to the design, development and commercialization of stereopure nucleic acid therapeutics. We intend to file new patent applications and take other steps to leverage, expand and enforce our intellectual property position.
- ***Maintain and extend our leadership in oligonucleotide stereochemistry***. We plan to establish a dominant position in the field of oligonucleotide stereochemistry, advancing basic research and pharmacology across multiple therapeutic modalities and target classes.

Our Pipeline

We are developing nucleic acid therapeutics that are capable of targeting diseases in a wide range of organ systems and tissues. Based on our design principles, we have the ability to rapidly design and select lead therapeutic candidates with optimized pharmacological properties.

Our most advanced therapeutic programs are in Huntington's disease, DMD and IBD. In Huntington's disease, we have programs targeting HTT SNP-1 and HTT SNP-2; in DMD, we are targeting Exon 51; and in IBD, we are targeting SMAD7. We have product candidates in our programs targeting HTT SNP-1 and Exon 51, and we expect to select lead candidates in our HTT SNP-2 and SMAD7 programs in late 2015 and early 2016, respectively. We expect to file INDs with the FDA for each of these candidates in 2016 and early 2017. See "Business—Our Initial Therapeutic Candidates" for more information about these targets.

We also have late-stage discovery programs in epidermolysis bullosa simplex, in which we are targeting KRT14 SNP-1 and KRT14 SNP-2, and in DMD, in which we are focused on an additional DMD target, AcRIIb. We expect to identify lead candidates for these programs in 2016. See "Business—Our Late-Stage Discovery Programs" for more information about these targets.

Our therapeutic and late-stage discovery programs are summarized in the table below.

			Mechanism of Action			Milestones	
			Silencing				
Tissue	Disease	Target	Allele specific	Non-allele specific	Exon skipping	Next 12 months	12-24 months
Therapeutic programs							
CNS	Huntington's disease	HTT SNP-1	ü			IND-enabling studies	File IND, initiate Phase 1/2a
CNS	Huntington's disease	HTT SNP-2	ü			Candidate selection	File IND, initiate Phase 1/2a
Neuromuscular	Duchenne muscular dystrophy	Exon 51			ü	IND-enabling studies	File IND, initiate Phase 1/2a
GI	Inflammatory bowel disease	SMAD7		ü		Candidate selection	File IND, initiate Phase 1/2a
Late stage discovery programs							
Skin	Epidermolysis bullosa simplex	KRT14 SNP-1	ü			Lead optimization, candidate selection	File IND, initiate Phase 1/2a
Skin	Epidermolysis bullosa simplex	KRT14 SNP-2	ü			Lead optimization, candidate selection	File IND, initiate Phase 1/2a
Neuromuscular	Duchenne muscular dystrophy	AcRIIb		ü		Lead optimization, candidate selection	File IND, initiate Phase 1/2a

We also have early-stage discovery programs in which we are focused on screening activities and lead optimization for potential drug candidates targeting eye, hepatic and neuromuscular and central nervous system diseases.

We believe that, based on our initial selection criteria of novel and fast-follower opportunities, our platform can potentially be used in the near-term to design treatments for a number other target indications, mostly consisting of orphan indications.

Recent Private Placement

In August 2015, we completed a private placement of our Series B preferred shares, which was led by institutional investor Foresite Capital. Other new investors included entities affiliated with Fidelity Management and Research Company, New Leaf Venture Partners, Redmile Group, Jennison Associates (on behalf of certain clients), Cormorant Asset Management and certain private investment funds advised by Clough Capital Partners L.P. Our existing shareholders, RA Capital Management LLC and Kagoshima Shinsangyo Sosei Investment Limited Partnership, also participated in this private placement. Net proceeds from this private placement were approximately $62.5 million.

Risks Related to Our Business

Our business is subject to a number of risks you should be aware of before making an investment decision. These risks are discussed more fully in the “Risk Factors” section of this prospectus immediately following this prospectus summary. These risks include, among others, the following:

- We are a preclinical biopharmaceutical company with a history of losses, expect to continue to incur losses for the foreseeable future and may never achieve or maintain profitability. We have not produced any meaningful revenues and have not generated any product revenues to date. We do not expect to generate any product revenue for the foreseeable future.
- We will require substantial additional funding, which may not be available on acceptable terms, or at all.
- The approach we are taking to discover and develop nucleic acid therapeutics is novel and may never lead to marketable products.
- All of our therapeutic programs are still in the preclinical development stage. If we are unable to successfully complete preclinical and clinical development and commercialize product candidates, our business will be materially harmed.
- We have no experience conducting and managing the clinical trials necessary to obtain regulatory approval, including approval by the FDA, or otherwise advancing product candidates through the regulatory approval process.
- Even if we receive regulatory approval to market product candidates, the market may not be receptive to our product candidates upon their commercial introduction, which will prevent us from becoming profitable.
- The pharmaceutical market is intensely competitive. If we are unable to compete effectively with existing drugs, new treatment methods and new technologies, we may be unable to commercialize successfully any drugs that we develop.
- Intellectual property rights of third parties could adversely affect our ability to commercialize our product candidates, and we might be required to litigate or obtain licenses from third parties in order to develop or market our product candidates. Such litigation or licenses could be costly or not available on commercially reasonable terms. If we are unable to protect the confidentiality of our trade secrets, our business and competitive position will be harmed.
- We are subject to the laws of Singapore, which differ in certain material respects from the laws of the United States, including the Singapore Code on Take-Overs and Mergers pursuant to which a person acquiring 30% or more of our voting shares is required to conduct a takeover offer for all of our voting shares.

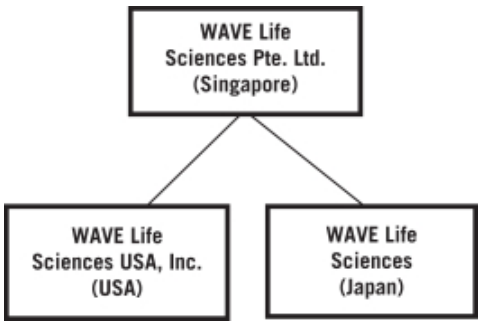
If we are unable to adequately address these and other risks we face, our business, financial condition, operating results and prospects may be adversely affected.

Emerging Growth Company Status

We are an emerging growth company, as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act, enacted in April 2012. We intend to take advantage of certain exemptions under the JOBS Act from various public company reporting requirements, including not being required to have our internal control over financial reporting audited by our independent registered public accounting firm pursuant to Section 404(b) of the Sarbanes-Oxley Act of 2002, reduced disclosure obligations regarding executive compensation and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and any golden parachute payments not previously approved. We may take advantage of these exemptions for up to five years or until we are no longer an emerging growth company, whichever is earlier.

Corporate History and Information

WAVE Life Sciences Pte. Ltd. (Registration No.: 201218209G), or WAVE, was incorporated under the laws of Singapore on July 23, 2012. Prior to the closing of this offering, WAVE Life Sciences Pte. Ltd. will convert from a private limited company to a Singapore public limited company and will then be known as WAVE Life Sciences Ltd. WAVE has two wholly-owned subsidiaries: WAVE Life Sciences USA, Inc., or WAVE USA, a Delaware corporation (formerly Ontorii, Inc.), and WAVE Life Sciences (Japan), or WAVE Japan, a company organized under the laws of Japan (formerly Chiralgen., Ltd.). Our therapeutic development research and development activities are conducted in WAVE USA's facilities and our process development research and development activities are conducted in WAVE Japan's facilities.



Our registered office is located at 8 Cross Street #10-00, PWC Building, Singapore 048424, and our telephone number at that address is +65 6236 7389. Our U.S. office and the WAVE USA office is located at 733 Concord Avenue, Cambridge, MA 02138, and our telephone number at that address is +1-617-949-2900. WAVE Japan's office is located at OHBIC 108, 12-75 Suzaki Uruma-shi, Okinawa, 904-2234, Japan. Our corporate website address is www.wavelifesciences.com. The information on our website is not part of this prospectus, and you should not consider any information contained on, or that can be accessed through, our website in deciding whether to purchase our ordinary shares.

The WAVE Life Sciences Pte. Ltd. name, the WAVE Life Sciences mark, and the other trademarks, trade names and service marks of WAVE Life Sciences Pte. Ltd. appearing in this prospectus are the property of WAVE Life Sciences Pte. Ltd. WAVE has applied to register certain of its trademarks in the United States. This prospectus also contains additional trade names, trademarks and service marks belonging to WAVE Life Sciences Pte. Ltd. and to other companies. We do not intend our use or display of other parties' trademarks, trade names or service marks to imply, and such use or display should not be construed to imply, a relationship with, or endorsement or sponsorship of us by, these other parties. Solely for convenience, the trademarks and trade names in this prospectus are referred to without the ® and ™ symbols, but such reference should not be construed as any indicator that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto.

THE OFFERING

Ordinary shares offered by us	shares
Ordinary shares to be outstanding after this offering	shares
Series A preferred shares to be outstanding after this offering	shares
Total ordinary shares and Series A preferred shares to be outstanding after this offering	shares
Option to purchase additional ordinary shares	We have granted the underwriters an option to purchase up to an additional ordinary shares from us within 30 days of the date of this prospectus.
Ordinary shares to be outstanding immediately after this offering	ordinary shares (or ordinary shares if the underwriters exercise their option to purchase additional ordinary shares in full).
Voting rights	Upon the closing of this offering, we will have two classes of outstanding securities: ordinary shares and Series A preferred shares. The rights of the Series A preferred shares will be identical to the ordinary shares, other than having: (1) no voting rights other than in limited circumstances, (2) a liquidation preference equal to $0.01 per Series A preferred share, or an aggregate of $9,653 based on the number of Series A preferred shares currently outstanding, and (3) the right to convert the Series A preferred shares at any time on a one-for-one basis into ordinary shares at the discretion of the holder. See “Description of Share Capital” for additional information.
Use of proceeds	We estimate that the net proceeds from this offering to us will be approximately $ million (or approximately $ million, if the underwriters exercise their option to purchase additional ordinary shares in full), based on an assumed initial offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, after deducting underwriting discounts and commissions and estimated offering expenses payable by us. We intend to use the net proceeds from this offering to fund our most advanced therapeutic programs and advance our late-stage discovery programs, including to select our lead product candidates in those programs, to advance our early-stage discovery programs, to expand our pipeline further, for working capital and for other general corporate purposes. See “Use of Proceeds.”

Dividend policy	We have never declared or paid any dividends on our ordinary shares. We do not currently anticipate declaring or paying any cash dividends on our ordinary shares for the foreseeable future. See “Dividend Policy.”
Risk factors	You should read the section titled “Risk Factors” for a discussion of factors to consider carefully before deciding to invest in our ordinary shares.
Proposed NASDAQ listing symbol	“WVE”

Certain of our existing shareholders and their affiliated entities, including affiliates of our directors, have indicated an interest in purchasing up to an aggregate of approximately $ million of our ordinary shares in this offering at the initial public offering price. However, because indications of interest are not binding agreements or commitments to purchase, the underwriters could determine to sell more, less or no shares to any of these existing shareholders and their affiliated entities and any of these existing shareholders and affiliated entities could determine to purchase more, less or no shares in this offering.

The number of our ordinary shares to be outstanding immediately after this offering is based on 3,602,123 ordinary shares outstanding as of June 30, 2015, and excludes:

- 456,449 ordinary shares issuable upon the exercise of options outstanding as of June 30, 2015, with an exercise price of $10.00 per share, plus 42,050 ordinary shares issuable upon the exercise of options granted subsequent to June 30, 2015, with a weighted average exercise price of $31.38 per share;
- 334,078 ordinary shares reserved for future issuance under our 2014 Equity Incentive Plan, or the 2014 Plan as of October 9, 2015; and
- 965,300 outstanding Series A preferred shares which can be converted at any time on a one-for-one basis into ordinary shares at the discretion of the holder.

Unless otherwise indicated, this prospectus reflects and assumes the following:

- the conversion of all outstanding Series B preferred shares into 1,320,000 ordinary shares prior to the closing of this offering;
- no exercise by the underwriters of their option to purchase up to an additional ordinary shares from us;
- the effectiveness of our amended and restated memorandum and articles of association in connection with the closing of this offering; and
- no exercise of any outstanding options after June 30, 2015.

SUMMARY CONSOLIDATED FINANCIAL DATA

You should read the following summary consolidated financial data together with our consolidated financial statements and related notes included elsewhere in this prospectus and the sections titled "Selected Consolidated Financial Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations." We have derived the summary consolidated statements of operations data for the years ended December 31, 2013 and 2014 from our audited consolidated financial statements appearing elsewhere in this prospectus. The summary consolidated statements of operations data for the six months ended June 30, 2014 and 2015 and the consolidated balance sheet data as of June 30, 2015 have been derived from our unaudited consolidated financial statements appearing elsewhere in this prospectus and have been prepared on the same basis as our audited consolidated financial statements. In the opinion of management, the unaudited data reflects all adjustments, consisting only of normal recurring adjustments, necessary for a fair presentation of the consolidated financial information in those statements. Our consolidated historical results are not necessarily indicative of the results that should be expected in the future, and our consolidated results for the six months ended June 30, 2015 are not necessarily indicative of the results that should be expected for the full year ending December 31, 2015.

	Year Ended December 31,		Six Months Ended June 30,	
	2013	2014	2014	2015
			(unaudited)	
	(in thousands, except share and per share data)			
Consolidated Statements of Operations Data:				
Revenue	$ —	$ —	$ —	$ 152
Operating expenses:				
Research and development	1,920	2,395	1,087	3,457
General and administrative	1,654	2,999	1,173	3,789
Total operating expenses	3,574	5,394	2,260	7,246
Loss from operations	(3,574)	(5,394)	(2,260)	(7,094)
Other (expense) income:				
Interest expense	(111)	(12)	(12)	(15)
Other, net	37	261	215	43
Total other (expense) income	(74)	249	203	28
Loss before income taxes	(3,648)	(5,145)	(2,057)	(7,066)
Income tax benefit (provision)	330	(84)	(60)	(99)
Net loss	$ (3,318)	$ (5,229)	$ (2,117)	$ (7,165)
Net loss per share attributable to ordinary shareholders—basic and diluted (1)	$ (7.69)	$ (5.40)	$ (2.41)	$ (3.32)
Weighted-average ordinary shares used in computing net loss per share attributable to ordinary shareholders—basic and diluted (1)	431,270	967,894	879,265	2,159,811

(1) See Note 10 to our consolidated financial statements appearing elsewhere in this prospectus for further details on the calculation of net loss per share attributable to ordinary shareholders, basic and diluted.

	As of June 30, 2015		
	Actual	Pro Forma (1)	Pro Forma as Adjusted (1)(2)
		(unaudited)	
		(in thousands)	
Consolidated Balance Sheet Data:			
Cash	$ 7,779	$ 70,279	$
Working capital	6,134	68,634	
Total assets	11,596	74,096	
Total liabilities	2,633	2,633	
Accumulated deficit	(23,041)	(23,041)	
Total shareholders' equity	8,963	71,463	

(1) The pro forma balance sheet data reflects the issuance of 1,320,000 Series B preferred shares in exchange for net proceeds of approximately $62.5 million, which occurred in August 2015.

(2) The pro forma as adjusted balance sheet data further reflects the issuance of ordinary shares upon the completion of this offering at an assumed initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, after deducting underwriting discounts and commissions and estimated offering expenses payable by us, as if this offering occurred on June 30, 2015. Each $1.00 increase (decrease) in the assumed initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, would increase (decrease) each of cash, working capital, total assets and total shareholders' equity by approximately $ million, assuming that the number of shares offered by us remains the same and after deducting underwriting discounts and commissions. Similarly, each increase (decrease) of 1,000,000 shares in the number of shares offered by us would increase (decrease) each of cash, working capital, total assets and total shareholders' equity by approximately $ million, assuming the assumed initial public offering price remains the same and after deducting underwriting discounts and commissions. The pro forma as adjusted presentation discussed above is illustrative only and will be adjusted based on the actual initial public offering price and other terms of this offering determined at pricing.

RISK FACTORS

Investing in our ordinary shares involves significant risks. In deciding whether to invest, you should carefully consider the following risk factors, as well as the other information contained in this prospectus, including our financial statements and the related notes appearing elsewhere in this prospectus. Any of the following risks could adversely affect our business, financial condition, results of operations and prospects and cause the value of our ordinary shares to decline, which could cause you to lose all or part of your investment. The risks and uncertainties we have described are not the only ones facing our company. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our business operations.

Risks Related to Our Financial Results and Capital Requirements

We are a preclinical biopharmaceutical company with a history of losses, expect to continue to incur losses for the foreseeable future and may never achieve or maintain profitability.

We are a preclinical biopharmaceutical company and have incurred significant operating losses since our incorporation in 2012. Our net loss was $3.3 million, $5.2 million and $7.2 million for the years ended December 31, 2013 and 2014, and for the six months ended June 30, 2015, respectively. As of June 30, 2015, we had an accumulated deficit of $23.0 million. To date, we have not generated any product revenue. Substantially all of our losses have resulted from expenses incurred in connection with our research and development programs and from general and administrative costs associated with our operations. We have no products on the market, we have not initiated clinical development of any product candidates and expect that it will be many years, if ever, before we have a product candidate ready for commercialization.

We have not generated, and do not expect to generate, any product revenue for the foreseeable future, and we expect to continue to incur significant operating losses for the foreseeable future due to the cost of research and development, preclinical studies and clinical trials and the regulatory approval process for product candidates. The amount of future losses is uncertain. To achieve profitability, we must successfully develop product candidates, obtain regulatory approvals to market and commercialize product candidates, manufacture any approved product candidates on commercially reasonable terms, establish a sales and marketing organization or suitable third-party alternatives for any approved product and raise sufficient funds to finance our business activities. We may never succeed in these activities and, even if we do, may never generate revenues that are significant or large enough to achieve profitability. Even if we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis. Our failure to become and remain profitable would decrease the value of our company and could impair our ability to raise capital, maintain our research and development efforts, expand our business or continue our operations. A decline in the value of our company could also cause you to lose all or part of your investment.

We will require substantial additional funding, which may not be available on acceptable terms, or at all.

We have used substantial funds to develop our therapeutic programs and proprietary synthetic chemistry drug development platform and will require substantial funds to conduct further research and development, including preclinical studies and clinical trials of our product candidates, seek regulatory approvals for our product candidates and manufacture and market any products that are approved for commercial sale. As of June 30, 2015, we had $7.8 million in cash. Based on our current operating plan, we believe that our available cash along with net proceeds of approximately $62.5 million from our Series B preferred share financing, which closed on August 14, 2015, and the net proceeds from this offering will be sufficient to fund our anticipated level of operations through at least 2017. Our future capital requirements and the period for which we expect our existing resources to support our operations may vary significantly from what we expect. Our monthly spending levels vary based on new and ongoing development and corporate activities. Because we cannot be certain of the length of time or activities associated with successful development and commercialization of our product candidates, we are unable to estimate the actual funds we will require to develop and commercialize them.

We do not expect to realize revenue from product sales, milestone payments or royalties in the foreseeable future, if at all. Our revenue sources will remain extremely limited unless and until our product candidates complete clinical development and are approved for commercialization and successfully marketed. To date, we have primarily financed

our operations through sales of our securities. We intend to seek additional funding in the future through either collaborations, public or private equity offerings or debt financings, credit or loan facilities or a combination of one or more of these funding sources. Our ability to raise additional funds will depend on financial, economic and other factors, many of which are beyond our control. Additional funds may not be available to us on acceptable terms or at all. If we raise additional funds by issuing equity securities, our shareholders will suffer dilution and the terms of any financing may adversely affect the rights of our shareholders. In addition, as a condition to providing additional funds to us, future investors may demand, and may be granted, rights superior to those of existing shareholders. Debt financing, if available, may involve restrictive covenants limiting our flexibility in conducting future business activities, and, in the event of insolvency, debt holders would be repaid before holders of equity securities received any distribution of corporate assets.

If we are unable to obtain funding on a timely basis or on acceptable terms, we may have to delay, limit or terminate our research and development programs and preclinical studies or clinical trials, if any, limit strategic opportunities or undergo reductions in our workforce or other corporate restructuring activities. We also could be required to seek funds through arrangements with collaborators or others that may require us to relinquish rights to some of our product candidates or technologies that we would otherwise pursue on our own.

Our short operating history may make it difficult for you to evaluate the success of our business to date and to assess our future viability.

We are a preclinical biopharmaceutical with limited operating history. We commenced active operations in 2012. Our operations to date have been limited to organizing and staffing our company, research and development activities, business planning and raising capital. All of our therapeutic programs are still in the preclinical development stage, and we plan to file our first INDs, for therapies to treat Huntington's disease and Duchenne muscular dystrophy, in late 2016 and early 2017. We have not yet demonstrated our ability to initiate or successfully complete any clinical trials, including large-scale, pivotal clinical trials, obtain marketing approvals, manufacture a commercial-scale product, or arrange for a third party to do so on our behalf, or conduct sales and marketing activities necessary for successful product commercialization. Typically, it takes many years to develop one new medicine from the time it is discovered to when it is available for treating patients. Further, biopharmaceutical product development is a capital-intensive and highly speculative undertaking that involves a substantial degree of risk. You should consider our prospects in light of the costs, uncertainties, delays and difficulties frequently encountered by companies in the early stages of development, especially preclinical biopharmaceutical companies such as ours. Any predictions you make about our future success or viability may not be as accurate as they could be if we had a longer operating history or a history of successfully developing and commercializing pharmaceutical products.

In addition, as a new business, we may encounter unforeseen expenses, difficulties, complications, delays and other known and unknown factors. We will need to transition from a company with a research focus to a company capable of supporting commercial activities. We may not be successful in such a transition.

Risks Related to The Discovery, Development and Commercialization of Our Product Candidates

The approach we are taking to discover and develop nucleic acid therapeutics is novel and may never lead to marketable products.

We have concentrated our efforts and research and development activities on nucleic acid therapeutics and our synthetic chemistry drug development platform. Our future success depends on the successful development of such therapeutics and the effectiveness of our platform. The scientific discoveries that form the basis for our efforts to discover and develop new drugs, including our discoveries about the relationships between oligonucleotide stereochemistry and pharmacology, are relatively new. The scientific evidence to support the feasibility of developing drugs based on these discoveries is both preliminary and limited. Skepticism as to the feasibility of developing nucleic acid therapeutics generally has been, and may continue to be, expressed in scientific literature. In addition, decisions by other companies with respect to their nucleic acid therapeutic development efforts may increase skepticism in the marketplace regarding the potential for nucleic acid therapeutics.

Relatively few nucleic acid therapeutic product candidates have been tested on humans, and a number of clinical trials for such therapeutics conducted by other companies have not been successful. The drugs we are studying may not demonstrate in patients the chemical and pharmacological properties ascribed to them in laboratory studies, and

they may interact with human biological systems in unforeseen, ineffective or harmful ways. If our nucleic acid product candidates prove to be ineffective, unsafe or commercially unviable, our entire platform and pipeline would have little, if any, value, which would substantially harm our business, financial condition, results of operations and prospects.

Because we are developing nucleic acid therapeutics, which are considered a relatively new class of drugs, there is increased risk that the outcome of our future clinical trials will not be sufficient to obtain regulatory approval.

The U.S. Food and Drug Administration, or the FDA, has relatively limited experience with nucleic acid therapeutics, which may increase the complexity, uncertainty and length of the regulatory approval process for our product candidates. To date, the FDA has approved only two nucleic acid therapeutics for marketing and commercialization, and the FDA and its foreign counterparts have not yet established any definitive policies, practices or guidelines in relation to these drugs. The lack of policies, practices or guidelines may hinder or slow review by the FDA of any regulatory filings that we may submit. Moreover, the FDA may respond to these submissions by defining requirements we may not have anticipated. Such responses could lead to significant delays in the clinical development of our product candidates. In addition, because there may be approved treatments for some of the diseases for which we may seek approval, in order to receive regulatory approval, we may need to demonstrate through clinical trials that the product candidates we develop to treat these diseases, if any, are not only safe and effective, but safer or more effective than existing products. Furthermore, in recent years, there has been increased public and political pressure on the FDA with respect to the approval process for new drugs, and the FDA's standards, especially regarding drug safety, appear to have become more stringent. As a result of the foregoing factors, we may never receive regulatory approval to market and commercialize any product candidate.

Even if we obtain regulatory approval, the approval may be for disease indications or patient populations that are not as broad as we intended or desired or may require labeling that includes significant use or distribution restrictions or safety warnings. We may be required to perform additional or unanticipated clinical trials to obtain regulatory approval or be subject to post-marketing testing requirements to maintain such approval. As a result, we may never succeed in developing a marketable product, we may not become profitable and the value of our ordinary shares could decline.

All of our therapeutic programs are in the preclinical development stage. Our preclinical studies and clinical trials may not be successful. If we are unable to commercialize our product candidates or experience significant delays in doing so, our business will be materially harmed.

We are very early in our development efforts, and all of our drug candidates are still in preclinical development. We have only recently identified product candidates for two of our programs. We have no products on the market or in clinical development. We have invested a significant portion of our efforts and financial resources in the identification and preclinical development of nucleic acid therapeutics and the development of our platform. Our ability to generate product revenue, which we do not expect will occur for many years, if ever, will depend heavily on the successful development and eventual commercialization of our product candidates. Our success will depend on several factors, including the following:

- successfully completing preclinical studies and clinical trials;
- receiving regulatory approvals from applicable regulatory authorities to market our product candidates;
- establishing commercial manufacturing capabilities or making arrangements with third-party manufacturers;
- obtaining and maintaining patent and trade secret protection and regulatory exclusivity for our product candidates;
- launching commercial sales of the products, if and when approved, whether alone or in collaboration with others;
- acceptance of the products, if and when approved, by patients, the medical community and third-party payors;
- effectively competing with other therapies; and
- a continued acceptable safety profile of the products following approval.

If we do not achieve one or more of these factors in a timely manner or at all, we could experience significant delays or an inability to successfully commercialize our product candidates, which would materially harm our business.

We may expend our limited resources to pursue a particular product candidate or indication and fail to capitalize on product candidates or indications that may be more profitable or for which there is a greater likelihood of success.

Because we have limited financial and managerial resources, we intend to focus on developing product candidates for specific indications that we identify as most likely to succeed, in terms of both regulatory approval and commercialization. As a result, we may forego or delay pursuit of opportunities with other product candidates or for other indications that may prove to have greater commercial potential. Our resource allocation decisions may cause us to fail to capitalize on viable commercial products or profitable market opportunities. Our spending on current and future research and development programs and product candidates for specific indications may not yield any commercially viable products. If we do not accurately evaluate the commercial potential or target market for a particular product candidate, we may relinquish valuable rights to that product candidate through collaboration, licensing or other royalty arrangements in cases in which it would have been more advantageous for us to retain sole development and commercialization rights to such product candidate.

Any product candidates we develop may fail in development or be delayed to a point where they do not become commercially viable.

Before obtaining regulatory approval for the commercial distribution of any of our product candidates, we must conduct, at our own expense, extensive preclinical studies and clinical trials to demonstrate the safety and efficacy in humans of our product candidates. Preclinical and clinical testing is expensive, difficult to design and implement, can take many years to complete and is uncertain as to outcome, and the historical failure rate for drugs in preclinical and clinical development is high. We currently have a number of therapeutic programs in the preclinical development stage. However, we may not be able to further advance any product candidates through clinical trials.

In addition, we, the FDA or comparable foreign regulatory authorities, or an institutional review board, or IRB, or similar foreign review board or committee, may suspend clinical trials of a product candidate at any time for various reasons, including if we or they believe the healthy volunteer subjects or patients participating in such trials are being exposed to unacceptable health risks. Among other reasons, adverse side effects of a product candidate on healthy volunteer subjects or patients in a clinical trial could result in the FDA or comparable foreign regulatory authorities suspending or terminating the trial and refusing to approve a particular product candidate for any or all indications of use.

Clinical trials also require the review, oversight and approval of IRBs, which continually review clinical investigations and protect the rights and welfare of human subjects. Inability to obtain or delay in obtaining IRB approval can prevent or delay the initiation and completion of clinical trials, and the FDA or comparable foreign regulatory authorities may decide not to consider any data or information derived from a clinical investigation not subject to initial and continuing IRB review and approval in support of a marketing application.

Our product candidates may encounter problems during clinical trials that will cause us, an IRB or regulatory authorities to delay, suspend or terminate these trials, or that will delay or confound the analysis of data from these trials. If we experience any such problems, we may not have the financial resources to continue development of the product candidate that is affected, or development of any of our other product candidates. We may also lose, or be unable to enter into, collaborative arrangements for the affected product candidate and for other product candidates we are developing.

The development of one or more of our product candidates can fail at any stage of testing. We may experience numerous unforeseen events during, or as a result of, preclinical studies and clinical trials that could delay or prevent regulatory approval or our ability to commercialize our product candidates, including:

- our preclinical studies or clinical trials may produce negative or inconclusive results, and we may decide, or regulators may require us, to conduct additional preclinical studies or clinical trials, or we may abandon projects that we had expected to be promising;
- delays in filing INDs or comparable foreign applications or delays or failure in obtaining the necessary approvals from regulators or IRBs in order to commence a clinical trial at a prospective trial site, or their suspension or termination of a clinical trial once commenced;
- conditions imposed on us by an IRB, or the FDA or comparable foreign authorities regarding the scope or design of our clinical trials;

- problems in engaging IRBs to oversee clinical trials or problems in obtaining or maintaining IRB approval of trials;
- delays in enrolling patients and volunteers into clinical trials, and variability in the number and types of patients and volunteers available for clinical trials;
- high drop-out rates for patients and volunteers in clinical trials;
- negative or inconclusive results from our clinical trials or the clinical trials of others for product candidates similar to ours;
- inadequate supply or quality of product candidate materials or other materials necessary for the conduct of our clinical trials;
- greater than anticipated clinical trial costs;
- serious and unexpected drug-related side effects experienced by participants in our clinical trials or by individuals using drugs similar to our product candidates;
- poor or disappointing effectiveness of our product candidates during clinical trials;
- unfavorable FDA or other regulatory agency inspection and review of a clinical trial site or records of any clinical or preclinical investigation;
- failure of our third-party contractors or investigators to comply with regulatory requirements or otherwise meet their contractual obligations in a timely manner, or at all;
- governmental or regulatory delays and changes in regulatory requirements, policy and guidelines, including the imposition of additional regulatory oversight around clinical testing generally or with respect to our product candidates in particular; or
- varying interpretations of data by the FDA and similar foreign regulatory agencies.

If the development of any of our product candidates fails or is delayed to a point where such product candidate is no longer commercially viable, our business may be materially harmed.

Results of preclinical studies and early clinical trials may not be predictive of results of future clinical trials.

If we enter into clinical trials, the results from preclinical studies or early clinical trials of a product candidate may not predict the results that will be obtained in subsequent subjects or in subsequent clinical trials of that product candidate or any other product candidate. The design of a clinical trial can determine whether its results will support approval of a product candidate and flaws in the design of a clinical trial may not become apparent until the clinical trial is well advanced. We have no experience in designing clinical trials and we may be unable to design and execute a clinical trial to support regulatory approval of our product candidates. In addition, preclinical and clinical data are often susceptible to varying interpretations and analyses. Product candidates that seemingly perform satisfactorily in preclinical studies may nonetheless fail to obtain regulatory approval. There is a high failure rate for drugs proceeding through clinical trials. A number of companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in clinical development even after achieving promising results in earlier studies, and any such setbacks in our clinical development could negatively affect our business and operating results.

If we experience delays or difficulties in the enrollment of patients in clinical trials, our receipt of necessary regulatory approvals could be delayed or prevented.

Clinical trials of a new product candidate require the enrollment of a sufficient number of patients, including patients who are suffering from the disease the product candidate is intended to treat and who meet other eligibility criteria. Rates of patient enrollment are affected by many factors, including the size of the patient population, the age and condition of the patients, the stage and severity of disease, the nature of the protocol, the proximity of patients to clinical sites, the availability of effective treatments for the relevant disease, and the eligibility criteria for the clinical trial. Delays or difficulties in patient enrollment or difficulties retaining trial participants, including as a result of the availability of existing or other investigational treatments, can result in increased costs, longer development times or termination of a clinical trial.

We may be unable to obtain regulatory approval in the United States or foreign jurisdictions and, as a result, unable to commercialize our product candidates and our ability to generate revenue will be materially impaired.

Our product candidates are subject to extensive governmental regulations relating to, among other things, research, testing, development, manufacturing, safety, efficacy, approval, recordkeeping, reporting, labeling, storage,

packaging, advertising and promotion, pricing, marketing and distribution of drugs. Rigorous preclinical studies and clinical trials and an extensive regulatory approval process are required to be successfully completed in the United States and in many foreign jurisdictions before a new drug can be marketed. Satisfaction of these and other regulatory requirements is costly, time consuming, uncertain and subject to unanticipated delays. It is possible that none of the product candidates we may develop will obtain the regulatory approvals necessary for us or our collaborators to begin selling them.

We have no experience in conducting and managing the human clinical trials necessary to obtain regulatory approvals, including approval by the FDA, or otherwise advancing product candidates through the regulatory approval process. The time required to obtain FDA and other approvals is unpredictable but typically takes many years following the commencement of clinical trials, depending upon the type, complexity and novelty of the product candidate. The standards that the FDA and its foreign counterparts use when regulating us are not always applied predictably or uniformly and can change. Any analysis we perform of data from preclinical and clinical activities is subject to confirmation and interpretation by regulatory authorities, which could delay, limit or prevent regulatory approval. We may also encounter unexpected delays or increased costs due to new government regulations, for example, from future legislation or administrative action, or from changes in FDA policy during the period of product development, clinical trials and FDA regulatory review. It is impossible to predict whether legislative changes will be enacted, or whether FDA or foreign regulations, guidance or interpretations will be changed, or what the impact of such changes, if any, may be.

Any delay or failure in obtaining required approvals could adversely affect our ability to generate revenues from the particular product candidate for which we are seeking approval. Furthermore, any regulatory approval to market a product may be subject to limitations on the approved uses for which we may market the product or the labeling or other restrictions. In addition, the FDA has the authority to require a Risk Evaluation and Mitigation Strategy, or REMS, plan as part of a new drug application, or NDA, or after approval, which may impose further requirements or restrictions on the distribution or use of an approved drug, such as limiting prescribing to certain physicians or medical centers that have undergone specialized training, limiting treatment to patients who meet certain safe-use criteria and requiring treated patients to enroll in a registry. These limitations and restrictions may limit the size of the market for the product and affect reimbursement by third-party payors.

We are also subject to numerous foreign regulatory requirements governing, among other things, the conduct of clinical trials, manufacturing and marketing authorization, pricing and third-party reimbursement. The foreign regulatory approval process varies among countries and includes all of the risks associated with FDA approval described above as well as risks attributable to the satisfaction of local regulations in foreign jurisdictions. Approval by the FDA does not ensure approval by comparable regulatory authorities outside the United States and vice versa.

Even if we obtain regulatory approvals, our marketed drugs will be subject to ongoing regulatory oversight. If we fail to comply with continuing U.S. and foreign requirements, our approvals could be limited or withdrawn, we could be subject to other penalties, and our business would be seriously harmed.

Following any initial regulatory approval of any drugs we may develop, we will also be subject to continuing regulatory oversight, including the review of adverse drug experiences and clinical results that are reported after our drug products are made commercially available. This would include results from any post-marketing tests or surveillance to monitor the safety and efficacy of the drug product required as a condition of approval or agreed to by us. Any regulatory approvals that we receive for our product candidates may also be subject to limitations on the approved uses for which the product may be marketed. Other ongoing regulatory requirements include, among other things, submissions of safety and other post-marketing information and reports, registration and listing, as well as continued compliance with cGMP requirements and good clinical practices for any clinical trials that we conduct post-approval. In addition, we are conducting, and intend to continue to conduct, clinical trials for our product candidates, and we intend to seek approval to market our product candidates, in jurisdictions outside of the United States, and therefore will be subject to, and must comply with, regulatory requirements in those jurisdictions.

The FDA has significant post-market authority, including, for example, the authority to require labeling changes based on new safety information and to require post-market studies or clinical trials to evaluate serious safety risks related to the use of a drug and to require withdrawal of the product from the market. The FDA also has the authority

to require a REMS plan after approval, which may impose further requirements or restrictions on the distribution or use of an approved drug.

The manufacturer and manufacturing facilities we use to make our product candidates will also be subject to periodic review and inspection by the FDA and other regulatory agencies. The discovery of any new or previously unknown problems with us or our third-party manufacturers, or our or their manufacturing processes or facilities, may result in restrictions on the drug or manufacturer or facility, including withdrawal of the drug from the market. We may not have the ability or capacity to manufacture material at a broader commercial scale in the future. We may manufacture clinical trial materials or we may contract a third party to manufacture these materials for us. Reliance on third-party manufacturers entails risks to which we would not be subject if we manufactured products ourselves, including reliance on the third-party manufacturer for regulatory compliance. Our product promotion and advertising will also be subject to regulatory requirements and continuing regulatory review.

If we or our collaborators, manufacturers or service providers fail to comply with applicable continuing regulatory requirements in the United States or foreign jurisdictions in which we may seek to market our products, we or they may be subject to, among other things, fines, warning letters, holds on clinical trials, refusal by the FDA or comparable foreign regulatory authorities to approve pending applications or supplements to approved applications, suspension or withdrawal of regulatory approval, product recalls and seizures, refusal to permit the import or export of products, operating restrictions, injunction, civil penalties and criminal prosecution.

Even if we receive regulatory approval to market our product candidates, the market may not be receptive to our product candidates upon their commercial introduction, which will prevent us from becoming profitable.

Our product candidates are based upon new discoveries, technologies and therapeutic approaches. Key participants in pharmaceutical marketplaces, such as physicians, third-party payors and consumers, may not adopt a product intended to improve therapeutic results that is based on the technology employed by nucleic acid therapeutics. As a result, it may be more difficult for us to convince the medical community and third-party payors to accept and use our product, or to provide favorable reimbursement.

Other factors that we believe will materially affect market acceptance of our product candidates include:

- the timing of our receipt of any regulatory approvals, the terms of any approvals and the countries in which approvals are obtained;
- the safety and efficacy of our product candidates, as demonstrated in clinical trials and as compared with alternative treatments, if any;
- the prevalence and severity of any side effects;
- relative convenience and ease of administration of our product candidates;
- the willingness of patients to accept potentially new routes of administration;
- the success of our physician education programs;
- the availability of government and third-party payor coverage and adequate reimbursement;
- the pricing of our products, particularly as compared to alternative treatments; and
- availability of alternative effective treatments for the diseases that product candidates we develop are intended to treat and the relative risks, benefits and costs of those treatments.

In addition, our estimates regarding the potential market size may be materially different from what we currently expect at the time we commence commercialization, which could result in significant changes in our business plan and may significantly harm our results of operations and financial condition.

The pharmaceutical market is intensely competitive. If we are unable to compete effectively with existing drugs, new treatment methods and new technologies, we may be unable to commercialize successfully any drugs that we develop.

The pharmaceutical market is intensely competitive and rapidly changing. Many large pharmaceutical and biotechnology companies, academic institutions, governmental agencies and other public and private research organizations are pursuing the development of novel drugs for the same diseases that we are targeting or expect to target. Many of our competitors have:

- much greater financial, technical and human resources than we have at every stage of the discovery, development, manufacture and commercialization of products;
- more extensive experience in designing and conducting preclinical studies and clinical trials, obtaining regulatory approvals, and in manufacturing, marketing and selling pharmaceutical products;
- product candidates that are based on previously tested or accepted technologies;
- products that have been approved or are in late stages of development; and
- collaborative arrangements in our target markets with leading companies and research institutions.

We will face intense competition from drugs that have already been approved and accepted by the medical community for the treatment of the conditions for which we may develop drugs. We also expect to face competition from new drugs that enter the market. We believe a significant number of drugs are currently under development, and may become commercially available in the future, for the treatment of conditions for which we may try to develop drugs. These drugs may be more effective, safer, less expensive, or marketed and sold more effectively, than any products we develop.

Our competitors may develop or commercialize products with significant advantages over any products we are able to develop and commercialize based on many different factors, including:

- the safety and effectiveness of our products relative to alternative therapies, if any;
- the ease with which our products can be administered and the extent to which patients accept relatively new routes of administration;
- the timing and scope of regulatory approvals for these products;
- the availability and cost of manufacturing, marketing and sales capabilities;
- price;
- reimbursement coverage; and
- patent position.

Our competitors may therefore be more successful in commercializing their products than we are, which could adversely affect our competitive position and business. Competitive products may make any products we develop obsolete or noncompetitive before we can recover the expenses of developing and commercializing our product candidates. Such competitors could also recruit our employees, which could negatively impact our level of expertise and the ability to execute on our business plan.

If we or our collaborators, manufacturers or service providers fail to comply with applicable healthcare laws and regulations, we or they could be subject to enforcement actions, which could affect our ability to develop, market and sell our products and may harm our reputation.

As a manufacturer of pharmaceuticals, we are currently or may in the future be subject to federal, state, local, and comparable foreign healthcare laws and regulations pertaining to such topics as fraud and abuse and patients' rights. These laws may constrain the business or financial arrangements and relationships through which we conduct our operations, including how we research, market, sell and distribute our products for which we obtain marketing approval. These laws and regulations include:

- the U.S. federal Anti-Kickback Statute, which prohibits, among other things, persons and entities from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward, or in return for, either the referral of an individual for a healthcare item or

service, or the purchasing, recommending, or ordering of an item or service, for which payment may be made under a federal healthcare program such as Medicare or Medicaid;

- the U.S. federal false claims and civil monetary penalties laws, including the civil False Claims Act, which prohibits, among other things, individuals or entities from knowingly presenting or causing to be presented, claims for payment by government-funded programs such as Medicare or Medicaid that are false or fraudulent, or making a false statement to avoid, decrease, or conceal an obligation to pay money to the federal government;
- the U.S. federal Health Insurance Portability and Accountability Act, or HIPAA, which imposes criminal and civil liability for, among other things, executing a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters;
- HIPAA as amended by the Health Information Technology for Economic and Clinical Health, or HITECH, Act, and its implementing regulations, which impose requirements relating to the privacy, security, and transmission of individually identifiable health information; and require notification to affected individuals and regulatory authorities of certain breaches of security of individually identifiable health information;
- the U.S. federal Physician Payments Sunshine Act, which requires certain manufacturers of medical devices, biological products, medical supplies, and drugs for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program, with specific exceptions, to report annually to the Centers for Medicare and Medicaid Services, or CMS, all transfers of value, including consulting fees, travel reimbursements, research grants, and other payments or gifts with values over $10 made to physicians and teaching hospitals, and teaching hospitals, applicable manufacturers, and applicable group purchasing organizations to report annually to CMS ownership and investment interests held by physicians and their immediate family members. Disclosure of such information is made by CMS on a publicly available website; and
- state and foreign laws comparable to each of the above federal laws, such as, for example: state anti-kickback and false claims laws applicable to commercial insurers and other non-federal payors; state laws that require pharmaceutical manufacturers to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government; state laws that require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures; and state and foreign laws relating governing the privacy and security of health information, some which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.

If our operations are found to be in violation of any such requirements, we may be subject to penalties, including civil or criminal penalties, criminal prosecution, monetary damages, the curtailment or restructuring of our operations, loss of eligibility to obtain approvals from the FDA, exclusion from participation in federal healthcare programs including Medicare and Medicaid, the imposition of a corporate integrity agreement with the Office of Inspector General of the Department of Health and Human Services, disgorgement, individual imprisonment, contractual damages, reputational harm, diminished profits and future earnings, any of which could adversely affect our financial results and adversely affect our ability to operate our business. We intend to develop and implement a comprehensive corporate compliance program prior to the commercialization of our product candidates. Although effective compliance programs can mitigate the risk of investigation and prosecution for violations of these laws, these risks cannot be entirely eliminated. Any action against us for an alleged or suspected violation could cause us to incur significant legal expenses and could divert our management's attention from the operation of our business, even if our defense is successful. In addition, achieving and sustaining compliance with applicable laws and regulations may be costly to us in terms of money, time and resources.

If we or our collaborators, manufacturers or service providers fail to comply with applicable federal, state or foreign laws or regulations, we could be subject to enforcement actions, which could affect our ability to develop, market and sell our products successfully and could harm our reputation and lead to reduced acceptance of our products by the market. These enforcement actions include, among others:

- adverse regulatory inspection findings;
- warning letters;

- voluntary or mandatory product recalls or public notification or medical product safety alerts to healthcare professionals;
- restrictions on, or prohibitions against, marketing our products;
- restrictions on, or prohibitions against, importation or exportation of our products;
- suspension of review or refusal to approve pending applications or supplements to approved applications;
- exclusion from participation in government-funded healthcare programs;
- exclusion from eligibility for the award of government contracts for our products;
- suspension or withdrawal of product approvals;
- product seizures;
- injunctions; and
- civil and criminal penalties, up to and including criminal prosecution resulting in fines, exclusion from healthcare reimbursement programs and imprisonment.

Moreover, federal, state or foreign laws or regulations are subject to change, and while we, our collaborators, manufacturers and/or service providers currently may be compliant, that could change due to changes in interpretation, prevailing industry standards or other reasons.

Any drugs we develop may become subject to unfavorable pricing regulations, third-party reimbursement practices or healthcare reform initiatives, thereby harming our business.

The regulations that govern marketing approvals, pricing and reimbursement for new drugs vary widely from country to country. Some countries require approval of the sale price of a drug before it can be marketed. In many countries, the pricing review period begins after marketing or product licensing approval is granted. In some foreign markets, prescription pharmaceutical pricing remains subject to continuing governmental control even after initial approval is granted. We are monitoring these regulations as several of our programs move into later stages of development, however, many of our programs are currently in the earlier stages of development and we will not be able to assess the impact of price regulations for a number of years. As a result, we might obtain regulatory approval for a product in a particular country, but then be subject to price regulations that delay our commercial launch of the product and negatively impact the revenues we are able to generate from the sale of the product in that country and potentially in other countries due to reference pricing.

Our ability to commercialize any products successfully also will depend in part on the extent to which coverage and adequate reimbursement for these products and related treatments will be available from government health administration authorities, private health insurers and other organizations. Even if we succeed in bringing one or more products to the market, these products may not be considered medically necessary and/or cost-effective, and the amount reimbursed for any products may be insufficient to allow us to sell our products on a competitive basis. For our earlier stage programs, we are unable at this time to determine their cost effectiveness or the likely level or method of reimbursement. Increasingly, the third-party payors who reimburse patients or healthcare providers, such as government and private insurance plans, are requiring that drug companies provide them with predetermined discounts from list prices, and are seeking to reduce the prices charged or the amounts reimbursed for pharmaceutical products. If the price we are able to charge for any products we develop, or the reimbursement provided for such products, is inadequate in light of our development and other costs, our return on investment could be adversely affected.

We currently expect that any drugs we develop may need to be administered under the supervision of a physician on an outpatient basis. Under currently applicable U.S. law, certain drugs that are not usually self-administered (including injectable drugs) may be eligible for coverage under the Medicare Part B program if:

- they are incident to a physician’s services;
- they are reasonable and necessary for the diagnosis or treatment of the illness or injury for which they are administered according to accepted standards of medical practice; and
- they have been approved by the FDA and meet other requirements of the statute.

There may be significant delays in obtaining coverage for newly-approved drugs, and coverage may be more limited than the purposes for which the drug is approved by the FDA or comparable foreign regulatory authorities. Patients who are prescribed medications for the treatment of their conditions, and their prescribing physicians, generally rely on third-party payors to reimburse all or part of the costs associated with their prescription drugs. Patients are unlikely to use our products unless coverage is provided and reimbursement is adequate to cover all or a significant portion of the cost of our products. Therefore, coverage and adequate reimbursement is critical to new product acceptance. Coverage decisions may depend upon clinical and economic standards that disfavor new drug products when more established or lower cost therapeutic alternatives are already available or subsequently become available. Moreover, eligibility for coverage does not imply that any drug will be reimbursed in all cases or at a rate that covers our costs, including research, development, manufacture, sale and distribution. Interim payments for new drugs, if applicable, may also not be sufficient to cover our costs and may not be made permanent. Reimbursement may be based on payments allowed for lower-cost drugs that are already reimbursed, may be incorporated into existing payments for other services and may reflect budgetary constraints or imperfections in Medicare data. Net prices for drugs may be reduced by mandatory discounts or rebates required by government healthcare programs or private payors and by any future relaxation of laws that presently restrict imports of drugs from countries where they may be sold at lower prices than in the United States. Third-party payors often rely upon Medicare coverage policy and payment limitations in setting their own reimbursement rates. However, no uniform policy requirement for coverage and reimbursement for drug products exists among third-party payors in the United States. Therefore, coverage and reimbursement for drug products can differ significantly from payor to payor. As a result, the coverage determination process is often a time-consuming and costly process that will require us to provide scientific and clinical support for the use of our products to each payor separately, with no assurance that coverage and adequate reimbursement will be applied consistently or obtained in the first instance. Our inability to promptly obtain coverage and adequate reimbursement rates from both government-funded and private payors for new drugs that we develop and for which we obtain regulatory approval could adversely affect our operating results, our ability to raise capital needed to commercialize products, and our overall financial condition.

We believe that the efforts of governments and third-party payors to contain or reduce the cost of healthcare and legislative and regulatory proposals to broaden the availability of healthcare will continue to affect the business and financial condition of pharmaceutical and biopharmaceutical companies. A number of legislative and regulatory changes in the healthcare system in the United States and other major healthcare markets have been proposed and/or adopted in recent years, and such efforts have expanded substantially in recent years. These developments have included prescription drug benefit legislation that was enacted in 2003 and took effect in January 2006, healthcare reform legislation enacted by certain states, and major healthcare reform legislation that was passed by Congress and enacted into law in the United States in 2010. These developments could, directly or indirectly, affect our ability to sell our products, if approved, at a favorable price.

In particular, in March 2010, the Patient Protection and Affordable Care Act, or PPACA, was signed into law. This new legislation changes the current system of healthcare insurance and benefits and is intended to broaden access to healthcare coverage, enhance remedies against fraud and abuse, add transparency requirements for the healthcare and health insurance industries, impose taxes and fees on the healthcare industry, impose health policy reforms, and control costs. The new law also contains provisions that will affect companies in the pharmaceutical industry and other healthcare related industries by imposing additional costs and changes to business practices. Provisions affecting pharmaceutical companies include the following:

- Minimum rebates for drugs sold under the Medicaid Drug Rebate Program have increased, and the rebate requirement has been extended to drugs used in risk-based Medicaid managed care plans.
- The 340B Drug Pricing Program under the Public Health Service Act has been extended to require mandatory discounts for drug products sold to certain critical access hospitals, cancer hospitals and other covered entities.
- Pharmaceutical manufacturers are required to offer discounts off negotiated prices on applicable brand-name drugs to eligible beneficiaries who fall within the Medicare Part D coverage gap, commonly referred to as the “Donut Hole.”
- Pharmaceutical manufacturers are required to pay an annual non-tax deductible fee to the federal government based on each company’s market share of prior year total sales of branded products to certain

federal healthcare programs, such as Medicare and Medicaid, and programs administered by the Department of Veterans Affairs or the Department of Defense. Since we expect our branded pharmaceutical sales to constitute a small portion of the total federal health program pharmaceutical market, we do not expect this annual assessment to have a material impact on our financial condition.

- A new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted, or injected.
- Expansion of eligibility criteria for Medicaid programs.
- A new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research.
- The new law provides that approval of an application for a follow-on biologic product may not become effective until 12 years after the date on which the reference innovator biologic product was first licensed by the FDA, with a possible six-month extension for pediatric products. After this exclusivity ends, it will be easier for so-called “biosimilar” manufacturers to enter the market, which is likely to reduce the pricing for such products and could affect our profitability. In July 2015, the U.S Court of Appeals for the Federal Circuit interpreted the statute as requiring biosimilar manufacturers to send a required pre-launch notice to the manufacturer of the reference biologic only after the FDA has approved the biosimilar for licensure. This ruling potentially provides the reference product manufacturer with an additional 180 days of marketing exclusivity for the innovator biologic, depending on whether the product’s 12-year exclusivity has expired at the time that the pre-launch notice is received from the biosimilar manufacturer.

The full effects of PPACA cannot be known until the new law is fully implemented through regulations or guidance issued by the CMS and other federal and state healthcare agencies. The financial impact of PPACA over the next few years will depend on a number of factors, including, but not limited, to the policies reflected in implementing regulations and guidance, and changes in sales volumes for products affected by the new system of rebates, discounts and fees. The new legislation may also have a positive impact on our future net sales, if any, by increasing the aggregate number of persons with healthcare coverage in the United States. We expect that PPACA, as well as other healthcare reform measures that may be adopted in the future, may result in more rigorous coverage criteria and lower reimbursement, and in additional downward pressure on the price that we receive for any approved product. Any reduction in reimbursement from Medicare or other government-funded programs may result in a similar reduction in payments from private payors. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability or commercialize our drugs.

Moreover, we cannot predict what healthcare reform initiatives may be adopted in the future. Further federal and state legislative and regulatory developments are likely, and we expect ongoing initiatives in the United States to increase pressure on drug pricing. Such reforms could have an adverse effect on anticipated revenues from product candidates that we may successfully develop and for which we may obtain regulatory approval and may affect our overall financial condition and ability to develop drug candidates.

Our ability to obtain services, reimbursement or funding from the federal government may be impacted by possible reductions in federal spending.

Other legislative changes have been proposed and adopted since PPACA was enacted. For example, in August 2011, the President signed into law the Budget Control Act of 2011, which, among other things, created the Joint Select Committee on Deficit Reduction (Joint Select Committee) to recommend to Congress proposals in spending reductions. The failure of Congress to enact deficit reduction measures of at least $1.2 trillion for the years 2013 through 2021 triggered the legislation’s automatic reduction to several government programs. These cuts included aggregate reductions to Medicare payments to providers of up to 2% per fiscal year, which went into effect beginning on April 1, 2013, and will stay in effect through 2024 unless additional Congressional action is taken. Additionally, under the American Taxpayer Relief Act of 2012, which was enacted on January 1, 2013, the imposition of these automatic cuts was delayed until March 1, 2013. As required by law, President Obama issued a sequestration order on March 1, 2013. Certain of these automatic cuts have been implemented resulting in reductions in Medicare payments to physicians, hospitals, and other healthcare providers, among other things. The full impact on our business of these automatic cuts is uncertain.

If other federal spending is reduced, any budgetary shortfalls may also impact the ability of relevant agencies, such as the FDA or National Institutes of Health to continue to function. Amounts allocated to federal grants and contracts may be reduced or eliminated. These reductions may also impact the ability of relevant agencies to timely review and approve drug research and development, manufacturing, and marketing activities, which may delay our ability to develop, market and sell any products we may develop.

There is a substantial risk of product liability claims in our business. If we are unable to obtain sufficient insurance, a product liability claim against us could adversely affect our business.

Our business exposes us to significant potential product liability risks that are inherent in the development, testing, manufacturing and marketing of human therapeutic products. Product liability claims could delay or prevent completion of our clinical development programs. If we succeed in marketing products, such claims could result in an FDA investigation of the safety and effectiveness of our products, our manufacturing processes and facilities or our marketing programs, and potentially a recall of our products or more serious enforcement action, limitations on the approved indications for which they may be used, or suspension or withdrawal of approvals. Regardless of the merits or eventual outcome, liability claims may also result in decreased demand for our products, injury to our reputation, costs to defend the related litigation, a diversion of management's time and our resources, substantial monetary awards to trial participants or patients and a decline in our share price. Any insurance we obtain may not provide sufficient coverage against potential liabilities. Furthermore, clinical trial and product liability insurance is becoming increasingly expensive. As a result, we may be unable to obtain sufficient insurance at a reasonable cost to protect us against losses caused by product liability claims that could adversely affect our business.

If we do not comply with laws regulating the protection of the environment and health and human safety, our business could be adversely affected.

Our research, development and manufacturing processes involve the use of hazardous materials, chemicals and various radioactive compounds. We maintain quantities of various flammable and toxic chemicals in our facilities that are required for our research, development and manufacturing activities. We are subject to federal, state and local laws and regulations governing the use, manufacture, storage, handling and disposal of these hazardous materials. We believe our procedures for storing, handling and disposing of these materials comply with the relevant guidelines and laws of the jurisdictions in which our facilities are located. Although we believe that our safety procedures for handling and disposing of these materials comply with the standards mandated by applicable regulations, the risk of accidental contamination or injury from these materials cannot be eliminated. If an accident occurs, we could be held liable for resulting damages, which could be substantial. We are also subject to numerous environmental, health and workplace safety laws and regulations, including those governing laboratory procedures, exposure to blood-borne pathogens and the handling of biohazardous materials.

Although we maintain workers' compensation insurance to cover us for costs and expenses we may incur due to injuries to our employees resulting from the use of these materials, this insurance may not provide adequate coverage against potential liabilities. We do not maintain insurance for environmental liability or toxic tort claims that may be asserted against us in connection with our storage or disposal of biological, hazardous or radioactive materials. Additional federal, state and local laws and regulations affecting our operations may be adopted in the future. We may incur substantial costs to comply with, and substantial fines or penalties if we violate any of these laws or regulations.

Risks Related to Our Dependence on Third Parties

We expect to depend on collaborations with third parties for the development and commercialization of certain of our product candidates.

We expect to depend on third-party collaborators for the development and commercialization of certain of our product candidates. We face significant competition in seeking appropriate collaborators. Our likely collaborators include large and mid-size pharmaceutical companies, regional and national pharmaceutical companies and biotechnology companies. In addition, there have been a significant number of recent business combinations among large pharmaceutical companies that have resulted in a reduced number of potential future collaborators.

Collaborations are complex and time-consuming to negotiate and document. We may not be able to negotiate collaborations on a timely basis, on acceptable terms, or at all. We may also be restricted under existing license agreements from entering into agreements on certain terms with potential collaborators. If we are unable to enter

into collaborations with respect to a product candidate, we may have to curtail the development of such product candidate, reduce or delay its development program or one or more of our other development programs, delay its potential commercialization or reduce the scope of any sales or marketing activities, or increase our expenditures and undertake development or commercialization activities at our own expense. If we elect to increase our expenditures to fund development or commercialization activities on our own, we may need to obtain additional capital, which may not be available to us on acceptable terms or at all. If we do not have sufficient funds, we may not be able to further develop our product candidates or bring them to market and generate product revenue.

Even if we are able to enter into any such arrangements with any third parties, we will likely have limited control over the amount and timing of resources that our collaborators dedicate to the development or commercialization of our product candidates. Our ability to generate revenues from these arrangements will depend on our collaborators' abilities to successfully perform the functions assigned to them in these arrangements.

Collaborations involving our product candidates would pose the following risks to us:

- collaborators have significant discretion in determining the efforts and resources that they will apply to these collaborations;
- collaborators may not pursue development and commercialization of our product candidates or may elect not to continue or renew development or commercialization programs based on clinical trial results, changes in the collaborator's strategic focus or available funding or external factors such as an acquisition that diverts resources or creates competing priorities;
- collaborators may delay clinical trials, provide insufficient funding for a clinical trial program, stop a clinical trial or abandon a product candidate, repeat or conduct new clinical trials or require a new formulation of a product candidate for clinical testing;
- collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with our products or product candidates if the collaborators believe that competitive products are more likely to be successfully developed or can be commercialized under terms that are more economically attractive than ours;
- a collaborator with marketing and distribution rights to one or more products may not commit sufficient resources to the marketing and distribution of such product or products;
- collaborators may not properly maintain or defend our intellectual property rights or may use our proprietary information in such a way as to invite litigation that could jeopardize or invalidate our proprietary information or expose us to potential litigation;
- disputes may arise between the collaborators and us that result in the delay or termination of the research, development or commercialization of our products or product candidates or that result in costly litigation or arbitration that diverts management attention and resources; and
- collaborations may be terminated and, if terminated, may result in a need for additional capital to pursue further development or commercialization of the applicable product candidates.

Collaboration agreements may not lead to development or commercialization of product candidates in the most efficient manner, or at all. Further, if a present or future collaborator of ours were to be involved in a business combination, the continued pursuit and emphasis on our product development or commercialization program could be delayed, diminished or terminated.

We rely, and expect to continue to rely, on third parties to conduct some aspects of our compound formulation, research and preclinical studies, and those third parties may not perform satisfactorily, including failing to meet deadlines for the completion of such formulation, research or testing.

We do not independently conduct all aspects of our drug discovery activities, compound formulation research or preclinical studies of product candidates. We currently rely, and expect to continue to rely, on third parties to conduct some aspects of our research and development and preclinical studies. Any of these third parties may terminate their engagements with us at any time. If we need to enter into alternative arrangements, it would delay our product development activities. Our reliance on these third parties for research and development activities will reduce our control over these activities but will not relieve us of our responsibilities. For example, for product candidates that we develop and commercialize on our own, we will remain responsible for ensuring that each of our

IND-enabling studies and clinical trials are conducted in accordance with the study plan and protocols for the trial. If these third parties do not successfully carry out their contractual duties, meet expected deadlines or conduct our studies in accordance with regulatory requirements or our stated study plans and protocols, we will not be able to complete, or may be delayed in completing, the necessary preclinical studies to enable us or our strategic alliance partners to select viable product candidates for IND submissions and will not be able to, or may be delayed in our efforts to, successfully develop and commercialize such product candidates.

If any of our research collaborators terminates or fails to perform its obligations under agreements with us, the development and commercialization of our product candidates could be delayed or terminated.

We are party to research collaboration agreements with certain academic partners. Our dependence on these research collaborators for select research capabilities means that our business could be adversely affected if any collaborator terminates its collaboration agreement with us or fails to perform its obligations under that agreement. Our current or future research collaborations, if any, may not be scientifically successful. Disputes may arise in the future with respect to the ownership of rights to technology or products developed with collaborators, which could have an adverse effect on our ability to develop and commercialize any affected product candidate.

Our current research collaborations allow, and we expect that any future research collaborations will allow, either party to terminate the collaboration for a material breach by the other party. In addition, our collaborators may have additional termination rights for convenience under certain circumstances. If we were to lose a collaborator, we would have to attract a new collaborator or develop internal research capabilities, which would require us to invest significant amounts of financial and management resources.

In addition, if we have a dispute with a collaborator over the ownership of technology or other matters, or if a collaborator terminates its collaboration with us, for breach or otherwise, or determines not to pursue the research that is the subject of the collaboration, it could delay or prevent the development of our product candidates, result in the need for additional company resources to develop product candidates, make it more difficult for us to attract new collaborators and could adversely affect how we are perceived in the business and financial communities.

We intend to rely on third parties to design, conduct, supervise and monitor our preclinical studies and clinical trials, and if those third parties perform in an unsatisfactory manner, it may harm our business.

We rely on third party clinical investigators, contract research organizations, or CROs, clinical data management organizations and consultants to design, conduct, supervise and monitor preclinical studies of our product candidates and will do the same for any clinical trials. Because we rely on third parties and do not have the ability to conduct preclinical studies or clinical trials independently, we have less control over the timing, quality and other aspects of preclinical studies and clinical trials than we would if we conducted them on our own. These investigators, CROs and consultants are not our employees and we have limited control over the amount of time and resources that they dedicate to our programs. These third parties may have contractual relationships with other entities, some of which may be our competitors, which may draw time and resources from our programs. Further, these third parties may not be diligent, careful or timely in conducting our preclinical studies or clinical trials, resulting in the preclinical studies or clinical trials being delayed or unsuccessful.

If we cannot contract with acceptable third parties on commercially reasonable terms, or at all, or if these third parties do not carry out their contractual duties, satisfy legal and regulatory requirements for the conduct of preclinical studies or clinical trials or meet expected deadlines, our clinical development programs could be delayed and otherwise adversely affected. In all events, we are responsible for ensuring that each of our preclinical studies and clinical trials is conducted in accordance with the general investigational plan and protocols for the trial. The FDA requires clinical trials to be conducted in accordance with good clinical practices, including for conducting, recording and reporting the results of preclinical studies and clinical trials to assure that data and reported results are credible and accurate and that the rights, integrity and confidentiality of clinical trial participants are protected. If we or our CROs fail to comply with these requirements, the data generated in our clinical trials may be deemed unreliable and the FDA may require us to perform additional clinical trials. Our reliance on third parties that we do not control does not relieve us of these responsibilities and requirements. Any such event could adversely affect our business, financial condition, results of operations and prospects.

We rely on third-party supply and manufacturing partners for drug supplies for our research and development and preclinical activities and may do the same for any clinical and commercial supplies of our product candidates.

We rely on third-party supply and manufacturing partners to supply the materials and components for, and manufacture, a portion of our research and development and preclinical study drug supplies and may do the same for any clinical trial drug supplies. We do not own manufacturing facilities or supply sources for such components and materials. There can be no assurance that our supply of research and development, preclinical and clinical development drugs and other materials will not be limited, interrupted, restricted in certain geographic regions or of satisfactory quality or continue to be available at acceptable prices. In particular, any replacement of any drug product formulation manufacturer we may engage could require significant effort and expertise because there may be a limited number of qualified replacements.

The manufacturing process for a product candidate is subject to FDA and foreign regulatory authority review. Suppliers and manufacturers must meet applicable manufacturing requirements and undergo rigorous facility and process validation tests required by regulatory authorities in order to comply with regulatory standards, such as current Good Manufacturing Practices, or cGMPs. In the event that any of our suppliers or manufacturers fails to comply with such requirements or to perform its obligations to us in relation to quality, timing or otherwise, or if our supply of components or other materials becomes limited or interrupted for other reasons, we may be forced to manufacture the materials ourselves, for which we currently do not have the capabilities or resources, or enter into an agreement with another third party, which we may not be able to do on reasonable terms, if at all. In some cases, the technical skills or technology required to manufacture our product candidates may be unique or proprietary to the original manufacturer and we may have difficulty, or there may be contractual restrictions prohibiting us from, transferring such skills or technology to another third party and a feasible alternative may not exist. These factors would increase our reliance on such manufacturer or require us to obtain a license from such manufacturer in order to have another third party manufacture our product candidates. If we are required to change manufacturers for any reason, we will be required to verify that the new manufacturer maintains facilities and procedures that comply with quality standards and with all applicable regulations and guidelines. The delays associated with the verification of a new manufacturer could negatively affect our ability to develop product candidates in a timely manner or within budget.

We may rely on third party manufacturers if we receive regulatory approval for any product candidate. To the extent that we have existing, or enter into future, manufacturing arrangements with third parties, we will depend on these third parties to perform their obligations in a timely manner consistent with contractual and regulatory requirements, including those related to quality control and assurance. If we are unable to obtain or maintain third-party manufacturing for product candidates, or to do so on commercially reasonable terms, we may not be able to develop and commercialize our product candidates successfully. Our or a third party's failure to execute on our manufacturing requirements could adversely affect our business in a number of ways, including:

- an inability to initiate or continue clinical trials of product candidates under development;
- delay in submitting regulatory applications, or receiving regulatory approvals, for product candidates;
- loss of the cooperation of a collaborator;
- subjecting our product candidates to additional inspections by regulatory authorities;
- requirements to cease distribution or to recall batches of our product candidates; and
- in the event of approval to market and commercialize a product candidate, an inability to meet commercial demands for our products.

If any of our product candidates are approved for marketing and commercialization and we are unable to develop sales, marketing and distribution capabilities on our own or enter into agreements with third parties to perform these functions on acceptable terms, we will be unable to commercialize successfully any such future products.

We currently have no sales, marketing or distribution capabilities or experience. If any of our product candidates is approved, we will need to develop internal sales, marketing and distribution capabilities to commercialize such products, which would be expensive and time-consuming, or enter into collaborations with third parties to perform these services. If we decide to market our products directly, we will need to commit significant financial and managerial resources to develop a marketing and sales force with technical expertise and supporting distribution, administration and compliance capabilities. If we rely on third parties with such capabilities to market our products or

decide to co-promote products with collaborators, we will need to establish and maintain marketing and distribution arrangements with third parties, and there can be no assurance that we will be able to enter into such arrangements on acceptable terms or at all. In entering into third-party marketing or distribution arrangements, any revenue we receive will depend upon the efforts of the third parties and there can be no assurance that such third parties will establish adequate sales and distribution capabilities or be successful in gaining market acceptance of any approved product. If we are not successful in commercializing any product approved in the future, either on our own or through third parties, our business, financial condition, results of operations and prospects would be adversely affected.

Risks Related to Managing Our Operations

If we are unable to attract and retain qualified key management and scientists, staff, consultants and advisors, our ability to implement our business plan may be adversely affected.

We are highly dependent upon our senior management and our scientific, clinical and medical staff and advisors. The loss of the service of any of the members of our senior management, including Paul B. Bolno, M.D., our Chief Executive Officer, and Chandra Vargeese, Ph.D., our Senior Vice President, Head of Drug Discovery, could delay our research and development programs and materially harm our business, financial condition, results of operations and prospects. We are dependent on the continued service of our technical personnel because of the highly technical and novel nature of our product candidates, platform and technologies and the specialized nature of the regulatory approval process. Replacing such personnel may be difficult and may take an extended period of time because of the limited number of individuals in our industry with the breadth of skills and experience required to successfully execute our business strategy. Because our management team and key employees are not obligated to provide us with continued service, they could terminate their employment with us at any time without penalty. We do not maintain key person life insurance policies on any of our management team members or key employees. Our future success will depend in large part on our continued ability to attract and retain additional highly qualified scientific, technical and management personnel, as well as personnel with expertise in preclinical and clinical testing, manufacturing, governmental regulation and commercialization. We face competition for personnel from other companies, universities, public and private research institutions, government entities and other organizations. If we are unable to attract and retain qualified personnel, the rate and success at which we may be able to discover and develop our product candidates and implement our business plan will be limited.

As we continue with our preclinical studies and advance to any clinical trials, we may experience difficulties in managing our growth and expanding our operations.

We have limited experience in drug development and have not begun clinical trials for any of our product candidates. As we advance product candidates through preclinical studies and any clinical trials, we will need to expand our development, regulatory and manufacturing capabilities or contract with other organizations to provide these capabilities for us. In the future, we expect to have to manage additional relationships with collaborators or partners, suppliers and other organizations. Our ability to manage our operations and future growth will require us to continue to improve our operational, financial and management controls, reporting systems and procedures. We may not be able to implement improvements to our management information and control systems in an efficient or timely manner and may discover deficiencies in existing systems and controls. In addition, our future growth may require significant capital expenditures and may divert financial resources from other projects, such as the development of our product candidates. If we are unable to effectively manage our future growth, our expenses may increase and our ability to generate revenue could be reduced.

Our employees, consultants and collaborators may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements.

We are exposed to the risk of fraud or other misconduct by our employees, consultants and collaborators. Such misconduct could include intentional failures to comply with FDA regulations, provide accurate information to the FDA, comply with manufacturing standards we may establish, comply with federal and state healthcare fraud and abuse laws and regulations, report financial information or data accurately or disclose unauthorized activities to us. In particular, sales, marketing and business arrangements in the healthcare industry are subject to extensive laws and regulations intended to prevent fraud, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs and other business arrangements. Such misconduct could also involve the improper use of information obtained in the course of clinical trials, which could result in regulatory sanctions and serious

harm to our reputation. It is not always possible to identify and deter such misconduct, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws or regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, including the imposition of significant fines or other sanctions.

Our business and operations could suffer in the event of system failures.

Despite the implementation of security measures, our internal computer systems and those of our contractors and consultants are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, war, and telecommunication and electrical failures. Such events could cause interruption of our operations. For example, the loss of preclinical trial data or data from completed or ongoing clinical trials for our product candidates could result in delays in our regulatory filings and development efforts and significantly increase our costs. To the extent that any disruption or security breach were to result in a loss of or damage to our data, or inappropriate disclosure of confidential or proprietary information, we could incur liability and the development of our product candidates could be delayed.

Foreign currency exchange rates may adversely affect our results.

We are exposed to the effects of changes in foreign currency exchange rates, and we have not historically hedged our foreign currency exposure. Our Japanese subsidiary conducts its business in Japanese yen. As of December 31, 2014 and June 30, 2015, 35.4% and 7.2% of our assets, respectively, were located in Japan, and 17.7% and 8.2% of our general and administrative and research and development expenses were transacted in Japanese yen through the year ended December 31, 2014 and the six months ended June 30, 2015, respectively. Therefore, when the U.S. dollar strengthens relative to the yen, as it has in recent periods, our U.S. dollar reported revenue from non-U.S. dollar denominated income will decrease. Conversely, when the U.S. dollar weakens relative to the yen, our U.S. dollar reported expenses from non-U.S. dollar denominated operating costs will increase. Changes in the relative values of currencies occur regularly and, in some instances, could materially adversely affect our business, results of operations, financial condition or cash flows.

Risks Related to Our Intellectual Property

If we are not able to obtain and enforce patent protection for our technologies or product candidates, development and commercialization of our product candidates may be adversely affected.

Our success depends in part on our ability to obtain and maintain patents and other forms of intellectual property rights, including in-licenses of intellectual property rights of others, for our product candidates and platform, methods used to manufacture our product candidates and methods for treating patients using our product candidates, as well as our ability to preserve our trade secrets, to prevent third parties from infringing upon our proprietary rights and to operate without infringing upon the proprietary rights of others. We may not be able to apply for patents on certain aspects of our product candidates or our platform in a timely fashion or at all. Our existing issued and granted patents and any future patents we obtain may not be sufficiently broad to prevent others from using our technology or from developing competing products and technology. There is no guarantee that any of our pending patent applications will result in issued or granted patents, that any of our issued or granted patents will not later be found to be invalid or unenforceable or that any issued or granted patents will include claims that are sufficiently broad to cover our product candidates, our platform technologies, or any methods relating to them, or to provide meaningful protection from our competitors. Moreover, the patent position of biotechnology and pharmaceutical companies can be highly uncertain and involves complex legal and factual questions. We will be able to protect our proprietary rights from unauthorized use by third parties only to the extent that our current and future proprietary technology and product candidates are covered by valid and enforceable patents or are effectively maintained as trade secrets. If third parties disclose or misappropriate our proprietary rights, it may materially and adversely impact our position in the market.

Additionally, in some countries, applicants are not able to protect methods of treating human beings or medical treatment processes. Countries such as India, Mexico, China, Europe and elsewhere have enacted various rules and laws precluding issuance of patents encompassing any methods a doctor may practice on a human being or any other animal to treat a disease or condition. Further, many countries have enacted laws and regulatory regimes that

do not provide patent protection for methods of use of known compounds. Particularly given that some of our products may represent stereopure versions of previously described oligonucleotides, it may be difficult or impossible to obtain patent protection for them in relevant jurisdictions. Thus, in some countries and jurisdictions, it may not be possible to patent some of our products at all. In some countries and jurisdictions, only product claims may be obtained, and only when those products are new or novel. Also, patents issued on product claims cannot always be enforced to protect methods of using those products to treat or diagnose diseases or medical conditions. In such countries or jurisdictions, enforcement of patents to protect our products or their uses may be difficult or impossible. Lack of patent protection in such cases may have a materially adverse effect on our business and financial condition.

Furthermore, given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates, their manufacture or their use might expire before or shortly after those candidates receive regulatory approval and are commercialized. As a result, our owned and licensed patent portfolio may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours. We expect to seek extensions of patent terms where these are available upon regulatory approval in those countries where we are prosecuting patents. This includes in the United States under the Drug Price Competition and Patent Term Restoration Act of 1984, which permits a patent term extension of up to five years beyond the expiration of the patent. However, the applicable authorities, including the FDA in the United States, and any equivalent regulatory authority in other countries, may not agree with our assessment of whether such extensions are available, and may refuse to grant extensions to our patents, or may grant more limited extensions than we request. If this occurs, our competitors may take advantage of our investment in development and clinical trials by referencing our clinical and preclinical data and launch their product earlier than might otherwise be possible.

The U.S. Patent and Trademark Office, or USPTO, and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other provisions during the patent process. There are situations in which noncompliance can result in abandonment or lapse of a patent or patent application, or of right to enforce patent claims, resulting in partial or complete loss of patent rights in the relevant jurisdiction. In such an event, competitors might be able to enter the market earlier than would otherwise have been the case. The standards applied by the USPTO and foreign patent offices in granting patents are not uniform, can vary substantially from country to country and are not always applied predictably, requiring country-specific patent expertise in each jurisdiction in which patent protection is sought. For example, there is no uniform worldwide policy regarding patentable subject matter or the scope of claims allowable in biotechnology and pharmaceutical patents. As such, we do not know the degree of future protection that we will have on our proprietary products and technology. While we will endeavor to try to protect our product candidates and platform with intellectual property rights such as patents, as appropriate, the process of obtaining patents is time-consuming, expensive and sometimes unpredictable.

In addition, there are numerous recent changes to the patent laws and proposed changes to the rules of the USPTO which may have a significant impact on our ability to protect our technology and enforce our intellectual property rights. For example, the America Invents Act, enacted within the last several years, involves significant changes in patent legislation. The U.S. Supreme Court has ruled on several patent cases in recent years, some of which cases either narrow the scope of patent protection available in certain circumstances or weaken the rights of patent owners in certain situations. The recent decision by the U.S. Supreme Court in Association for *Molecular Pathology v. Myriad Genetics, Inc.* precludes a claim to a nucleic acid having a stated nucleotide sequence which is identical to a sequence found in nature and unmodified. We currently are not aware of an immediate impact of this decision on our patents or patent applications because we are developing nucleic acid products which contain modifications that we believe are not found in nature. However, this decision has yet to be clearly interpreted by courts and by the USPTO. We cannot assure you that the interpretations of this decision or subsequent rulings will not adversely impact our patents or patent applications. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on decisions by the U.S. Congress, the federal courts and the USPTO, the laws and regulations governing patents could change in unpredictable ways that would weaken our ability to obtain new patents or to enforce our existing patents and patents that we might obtain in the future.

Once granted, patents may remain open to opposition, interference, re-examination, post-grant review, *inter partes* review, nullification or derivation action in court or before patent offices or similar proceedings for a given period

after allowance or grant, during which time third parties can raise objections against such initial grant. In the course of such proceedings, which may continue for a protracted period of time, the patent owner may be compelled to limit the scope of the allowed or granted claims thus attacked, or may lose the allowed or granted claims altogether. In addition, there can be no assurance that:

- Others will not or may not be able to make, use or sell compounds that are the same as or similar to our product candidates but that are not covered by the claims of the patents that we own or license.
- We or our licensors, collaborators or any future collaborators are the first to make the inventions covered by each of our issued patents and pending patent applications that we own or license.
- We or our licensors, collaborators or any future collaborators are the first to file patent applications covering certain aspects of our inventions.
- Others will not independently develop similar or alternative technologies or duplicate any of our technologies without infringing our intellectual property rights.
- A third party may not challenge our patents and, if challenged, a court may not hold that our patents are valid, enforceable and infringed.
- Any issued patents that we own or have licensed will provide us with any competitive advantages, or will not be challenged by third parties.
- We may develop additional proprietary technologies that are patentable.
- The patents of others will not have an adverse effect on our business.
- Our competitors do not conduct research and development activities in countries where we do not have enforceable patent rights and then use the information learned from such activities to develop competitive products for sale in our major commercial markets.

We license patent rights from third-party owners or licensees. If such owners or licensees do not properly or successfully obtain, maintain or enforce the patents underlying such licenses, or if they retain or license to others any competing rights, our competitive position and business prospects may be adversely affected.

We do, and will continue to, rely on intellectual property rights licensed from third parties to protect certain aspects of our technology and programs. Specifically, we are a party to a license agreement with Max-Planck-Innovation GmbH, or Max Planck, pursuant to which Max Planck has licensed to us certain patent rights that provide intellectual property for research and development of single-stranded RNAi oligonucleotides. Under this agreement, we have a worldwide co-exclusive license from Max Planck for the exploitation of key intellectual property rights in this respect, and Max Planck retains ownership of the patents and patent applications to which we are licensed under the agreement. See “Business—Licensing Arrangements and Research Collaborations—Our Technology Licenses—Max-Planck—Innovation GmbH.” We also intend to license additional third-party intellectual property in the future. Our success will depend in part on the ability of our licensors to obtain, maintain and enforce patent protection for our licensed intellectual property, in particular, those patents to which we have secured exclusive rights. Our licensors may not successfully prosecute the patent applications licensed to us. Even if patents issue or are granted, our licensors may fail to maintain these patents, may determine not to pursue litigation against other companies that are infringing these patents, or may pursue litigation less aggressively than we would. Further, we may not obtain exclusive rights, which would allow for third parties to develop competing products. Without protection for, or exclusive right to, the intellectual property we license, other companies might be able to offer substantially identical products for sale, which could adversely affect our competitive business position and harm our business prospects. In addition, we may sublicense our rights under our third-party licenses to current or future collaborators or any future strategic partners. Any impairment of these sublicensed rights could result in reduced revenue under our any future collaboration agreements we may enter into or result in termination of an agreement by one or more of our collaborators or any future strategic partners.

Certain third parties have rights in the patents related to single-stranded oligonucleotides included in the license granted to us by Max Planck, which could allow them to develop, market and sell product candidates in competition with ours.

Our license from Max Planck is one of two maximum allowable co-exclusive licenses for the patents that are the subject of the license, the other of which is currently held by Isis Pharmaceuticals, Inc., or Isis. We therefore do not have rights under this license to prevent Isis from developing product candidates in competition with ours. In addition, the German and U.S. governments have certain rights to the inventions covered by the patent rights and

Max Planck, as an academic research and medical center, has the right to practice the licensed patent rights for educational, research and clinical uses. If a third party develops, manufactures, markets and sells any product covered by the same patent rights and technologies that compete with ours, it could significantly undercut the value of any of our product candidates that rely on the patent rights under that license, which would materially adversely affect our revenue, financial condition and results of operations.

Other companies or organizations may challenge our or our licensors' patent rights or may assert patent rights that prevent us from developing and commercializing our products.

Nucleic acid therapeutics is a relatively new scientific field, the commercial exploitation of which has resulted in many different patents and patent applications from organizations and individuals seeking to obtain patent protection in the field. We have obtained grants and issuances of patents in this field, and also have licensed from Max Planck certain such patents on a co-exclusive basis. The issued patents and pending patent applications in the U.S. and in key markets around the world that we own or license claim certain methods, compositions and processes relating to the discovery, development, manufacture and/or commercialization of nucleic acid therapeutics and/or our platform.

As the field of nucleic acid therapeutics matures, patent applications are being processed by national patent offices around the world. There is uncertainty about which patents will issue, and, if they do, as to when, to whom, and with what claims. It is likely that there will be significant litigation in the courts and other proceedings, such as interference, reexamination and opposition proceedings, in various patent offices relating to patent rights in the nucleic acid therapeutics field. In many cases, the possibility of appeal or opposition exists for either us or our opponents, and it may be years before final, unappealable rulings are made with respect to these patents in certain jurisdictions. The timing and outcome of these and other proceedings is uncertain and may adversely affect our business, particularly if we are not successful in defending the patentability and scope of our pending and issued patent claims or if third parties are successful in obtaining claims that cover our any of our product candidates or our platform. In addition, third parties may attempt to invalidate our intellectual property rights. Even if our rights are not directly challenged, disputes could lead to the weakening of our intellectual property rights. Our defense against any attempt by third parties to circumvent or invalidate our intellectual property rights could be costly to us, could require significant time and attention of our management and could adversely affect our business and our ability to successfully compete in the field of nucleic acid therapeutics.

There are many issued patents and/or pending patent applications that claim aspects of oligonucleotide chemistry and/or modifications that we may want or need to apply to our product candidates. There are also many issued patents and/or pending patent applications that claim targeted genes or portions of genes that may be relevant for nucleic acid drugs we wish to develop. Thus, it is possible that one or more organizations will hold patent rights to which we will need or want a license. If those organizations refuse to grant us a license to such patent rights on reasonable terms, we may not be able to market products or perform research and development or other activities covered by these patents.

We may not be able to protect our intellectual property rights throughout the world.

Obtaining a valid and enforceable issued or granted patent covering our technology in the United States and worldwide can be extremely costly. In jurisdictions where we have not obtained patent protection, competitors may use our technology to develop their own products and further, may export otherwise infringing products to territories where we have patent protection, but where it is more difficult to enforce a patent as compared to the United States Competitor products may compete with our future products in jurisdictions where we do not have issued or granted patents or where our issued or granted patent claims or other intellectual property rights are not sufficient to prevent competitor activities in these jurisdictions. The legal systems of certain countries, particularly certain developing countries, make it difficult to enforce patents and such countries may not recognize other types of intellectual property protection, particularly that relating to biopharmaceuticals. This could make it difficult for us to prevent the infringement of our patents or marketing of competing products in violation of our proprietary rights generally in certain jurisdictions. Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial cost and divert our efforts and attention from other aspects of our business.

We generally file a provisional patent application first (a priority filing) at the USPTO. A Patent Cooperation Treaty, or PCT, application is usually filed within twelve months after the priority filing. Regional and/or national patent applications may be pursued outside of the United States, either based on a PCT application or as a direct filing, in some cases claiming priority to a prior U.S. or PCT filing. Some of our cases have been filed in, for example, in

Australia, Brazil, Canada, Chile, China, Europe, Indonesia, Israel, India, Japan, South Korean, Mexico, Russia, Singapore and South Africa. We also commonly enter the national stage in the United States through a PCT filing. We have so far not filed for patent protection in all national and regional jurisdictions where such protection may be available. In addition, we may decide to abandon national and regional patent applications before grant. Finally, the grant proceeding of each national or regional patent is an independent proceeding which may lead to situations in which applications might in some jurisdictions be refused by the relevant registration authorities, while granted by others. It is also quite common that depending on the country, various scopes of patent protection may be granted on the same product candidate or technology.

The laws of some jurisdictions do not protect intellectual property rights to the same extent as the laws in the United States, and many companies have encountered significant difficulties in protecting and defending such rights in such jurisdictions. If we or our licensors encounter difficulties in protecting, or are otherwise precluded from effectively protecting, the intellectual property rights important for our business in such jurisdictions, the value of these rights may be diminished and we may face additional competition from others in those jurisdictions. Many countries have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties. In addition, many countries limit the enforceability of patents against government agencies or government contractors. In these countries, the patent owner may have limited remedies, which could materially diminish the value of such patent. If we or any of our licensors are forced to grant a license to third parties with respect to any patents relevant to our business, our competitive position in the relevant jurisdiction may be impaired and our business and results of operations may be adversely affected.

The requirements for patentability may differ in certain countries, particularly developing countries. For example, unlike other countries, China has a heightened requirement for patentability, and specifically requires a detailed description of medical uses of a claimed drug. In India, unlike the United States, there is no link between regulatory approval of a drug and its patent status. Furthermore, generic or biosimilar drug manufacturers or other competitors may challenge the scope, validity or enforceability of our or our licensors' or collaborators' patents, requiring us or our licensors or collaborators to engage in complex, lengthy and costly litigation or other proceedings. Generic or biosimilar drug manufacturers may develop, seek approval for, and launch generic versions of our products. In addition to India, certain countries in Europe and developing countries, including China, have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties. In those countries, we and our licensors or collaborators may have limited remedies if patents are infringed or if we or our licensors or collaborators are compelled to grant a license to a third party, which could materially diminish the value of those patents. This could limit our potential revenue opportunities. Accordingly, our and our licensors' and collaborators' efforts to enforce intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we own or license.

We or our licensors, collaborators or any future strategic partners may become subject to third party claims or litigation alleging infringement of patents or other proprietary rights or seeking to invalidate patents or other proprietary rights, and we may need to resort to litigation to protect or enforce our patents or other proprietary rights, all of which could be costly, time consuming, delay or prevent the development and commercialization of our product candidates, or put our patents and other proprietary rights at risk.

We or our licensors, collaborators or any future strategic partners may be subject to third-party claims for infringement or misappropriation of patent or other proprietary rights. We are generally obligated under our license or collaboration agreements to indemnify and hold harmless our licensors or collaborators for damages arising from intellectual property infringement by us. If we or our licensors, collaborators or any future strategic partners are found to infringe a third party patent or other intellectual property rights, we could be required to pay damages, potentially including treble damages, if we are found to have willfully infringed. In addition, we or our licensors, collaborators or any future strategic partners may choose to seek, or be required to seek, a license from a third party, which may not be available on acceptable terms, if at all. Even if a license can be obtained on acceptable terms, the rights may be non-exclusive, which could give our competitors access to the same technology or intellectual property rights licensed to us. If we fail to obtain a required license, we or our collaborator, or any future collaborator, may be unable to effectively market product candidates based on our technology, which could limit our ability to generate revenue or achieve profitability and possibly prevent us from generating revenue sufficient to sustain our operations. In addition, we may find it necessary to pursue claims or initiate lawsuits to protect or enforce our patent or other intellectual property rights. The cost to us in defending or initiating any litigation or other proceeding relating to patent or other proprietary rights, even if resolved in our favor, could be

substantial, and litigation would divert our management's attention. Some of our competitors may be able to sustain the costs of complex patent litigation more effectively than we can because they have substantially greater resources. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could delay our research and development efforts and limit our ability to continue our operations.

If we were to initiate legal proceedings against a third party to enforce a patent covering one of our products or our technology, the defendant could counterclaim that our patent is invalid or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity or unenforceability are commonplace. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, for example, lack of novelty, obviousness or non-enablement. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant information from the USPTO, or made a misleading statement, during prosecution. The outcome following legal assertions of invalidity and unenforceability during patent litigation is unpredictable. With respect to the validity question, for example, we cannot be certain that there is no invalidating prior art, of which we and the patent examiner were unaware during prosecution. If a defendant were to prevail on a legal assertion of invalidity or unenforceability, we would lose at least part, and perhaps all, of the patent protection on one or more of our products or certain aspects of our platform technology. Such a loss of patent protection could negatively impact our business. Patents and other intellectual property rights also will not protect our technology if competitors design around our protected technology without legally infringing our patents or other intellectual property rights.

Intellectual property rights of third parties could adversely affect our ability to commercialize our product candidates, and we might be required to litigate or obtain licenses from third parties in order to develop or market our product candidates. Such litigation or licenses could be costly or not available on commercially reasonable terms.

Because the nucleic acid therapeutics intellectual property landscape is still evolving, it is difficult to conclusively assess our freedom to operate without infringing third party rights. There are numerous companies that have pending patent applications and issued patents directed to certain aspects of nucleic acid therapeutics. Our competitive position may suffer if patents issued to third parties or other third party intellectual property rights cover our products or elements thereof, or our manufacture or uses relevant to our development plans. In such cases, we may not be in a position to develop or commercialize products or product candidates unless we successfully pursue litigation to nullify or invalidate the third party intellectual property right concerned, or enter into a license agreement with the intellectual property right holder, if available on commercially reasonable terms.

It is also possible that we have failed to identify relevant third party patents or applications. For example, U.S. applications filed before November 29, 2000 and certain U.S. applications filed after that date that will not be filed outside the United States remain confidential until patents issue. Patent applications in the United States and elsewhere are published approximately 18 months after the earliest filing for which priority is claimed, with such earliest filing date being commonly referred to as the priority date. Therefore, patent applications covering our products or platform technology could have been filed by others without our knowledge. Additionally, pending patent applications which have been published can, subject to certain limitations, be later amended in a manner that could cover our platform technologies, our products or the use of our products. Third party intellectual property right holders may also actively bring infringement claims against us. We cannot guarantee that we will be able to successfully settle or otherwise resolve such infringement claims. If we are unable to successfully settle future claims on terms acceptable to us, we may be required to engage in or continue costly, unpredictable and time-consuming litigation and may be prevented from or experience substantial delays in marketing our products. If we fail in any such dispute, in addition to being forced to pay damages, we may be temporarily or permanently prohibited from commercializing any of our product candidates that are held to be infringing. We might, if possible, also be forced to redesign product candidates so that we no longer infringe the third party intellectual property rights. Any of these events, even if we were ultimately to prevail, could require us to divert substantial financial and management resources that we would otherwise be able to devote to our business.

If we fail to comply with our obligations under any license, collaboration or other agreements, we may be required to pay damages and could lose intellectual property rights that are necessary for developing and protecting our product candidates or we could lose certain rights to grant sublicenses.

Our current license with Max Planck imposes, and any future licenses we enter into are likely to impose, various development, commercialization, funding, milestone, royalty, diligence, sublicensing, insurance, patent prosecution

and enforcement, and other obligations on us. If we breach any of these obligations, or use the intellectual property licensed to us in an unauthorized manner, we may be required to pay damages and the licensor may have the right to terminate the license, which could result in us being unable to develop, manufacture and sell products that are covered by the licensed technology or enable a competitor to gain access to the licensed technology. Moreover, our licensors may own or control intellectual property that has not been licensed to us and, as a result, we may be subject to claims, regardless of their merit, that we are infringing or otherwise violating the licensor's rights. In addition, while we cannot currently determine the amount of the royalty obligations we would be required to pay on sales of future products, if any, the amounts may be significant. The amount of our future royalty obligations will depend on the technology and intellectual property we use in products that we successfully develop and commercialize, if any. Therefore, even if we successfully develop and commercialize products, we may be unable to achieve or maintain profitability.

If we are unable to protect the confidentiality of our trade secrets, our business and competitive position would be harmed.

In addition to seeking patent protection for certain aspects of our product candidates, we also consider trade secrets, including confidential and unpatented know-how important to the maintenance of our competitive position. We protect trade secrets and confidential and unpatented know-how, in part, by entering into non-disclosure and confidentiality agreements with parties who have access to such knowledge, such as our employees, corporate collaborators, outside scientific collaborators, CROs, contract manufacturers, consultants, advisors and other third parties. We also enter into confidentiality and invention or patent assignment agreements with our employees and consultants that obligate them to maintain confidentiality and assign their inventions to us. Despite these efforts, any of these parties may breach the agreements and disclose our proprietary information, including our trade secrets, and we may not be able to obtain adequate remedies for such breaches. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive and time-consuming, and the outcome is unpredictable. In addition, some courts in the United States and certain foreign jurisdictions are less willing or unwilling to protect trade secrets. If any of our trade secrets were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent them from using that technology or information to compete with us. If any of our trade secrets were to be disclosed to or independently developed by a competitor, our competitive position would be harmed.

We may be subject to claims that we or our employees or consultants have wrongfully used or disclosed alleged trade secrets of our employees' or consultants' former employers or their clients. These claims may be costly to defend and if we do not successfully do so, we may be required to pay monetary damages and may lose valuable intellectual property rights or personnel.

Many of our employees were previously employed at universities or biotechnology or pharmaceutical companies, including our competitors or potential competitors. Although no claims against us are currently pending, we may be subject to claims that these employees or we have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of their former employers. Litigation may be necessary to defend against these claims. If we fail in defending such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel. A loss of key research personnel or their work product could hamper our ability to commercialize, or prevent us from commercializing, our product candidates, which could severely harm our business. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to management.

If our trademarks and trade names are not adequately protected, then we may not be able to build name recognition in our markets of interest and our business may be adversely affected.

Our trademarks or trade names may be challenged, infringed, circumvented or declared generic or determined to be infringing on other marks. We may not be able to protect our rights to these trademarks and trade names or may be forced to stop using these names, which we need for name recognition by potential partners or customers in our markets of interest. If we are unable to establish name recognition based on our trademarks and trade names, we may not be able to compete effectively and our business may be adversely affected.

Risks Related to Our Being a Singapore Company

We are a Singapore incorporated company and it may be difficult to enforce a judgment of U.S. courts for civil liabilities under U.S. federal securities laws against us, our directors or officers in Singapore.

We are incorporated under the laws of the Republic of Singapore, and certain of our officers and directors are residents outside the United States. Moreover, a majority of our consolidated assets are located outside the United

States. Although we are incorporated outside the United States, we have agreed to accept service of process in the United States through our agent designated for that purpose. Nevertheless, because a majority of the consolidated assets owned by us are located outside the United States, any judgment obtained in the United States against us may not be collectible within the United States.

There is no treaty between the United States and Singapore providing for the reciprocal recognition and enforcement of judgments in civil and commercial matters and a final judgment for the payment of money rendered by any federal or state court in the United States based on civil liability, whether or not predicated solely upon the federal securities laws, would, therefore, not be automatically enforceable in Singapore. It is not clear whether a Singapore court may impose civil liability on us or our directors and officers who reside in Singapore in a suit brought in the Singapore courts against us or such persons with respect to a violation solely of the federal securities laws of the United States. In addition, holders of book-entry interests in our shares will be required to be registered shareholders as reflected in our shareholder register in order to have standing to bring a shareholder action and, if successful, to enforce a foreign judgment against us, our directors or our executive officers in the Singapore courts. The administrative process of becoming a registered holder could result in delays prejudicial to any legal proceedings or enforcement action. Consequently, it may be difficult for investors to enforce against us, our directors or our officers in Singapore judgments obtained in the United States which are predicated upon the civil liability provisions of the federal securities laws of the United States. See “Enforcement of Civil Liabilities Under United States Federal Securities Laws.”

We are incorporated in Singapore and our shareholders may have more difficulty in protecting their interests than they would as shareholders of a corporation incorporated in the United States.

Our corporate affairs are governed by our memorandum and articles of association and by the laws governing corporations incorporated in Singapore. The rights of our shareholders and the responsibilities of the members of our board of directors under Singapore law are different from those applicable to a corporation incorporated in the United States. Principal shareholders of Singapore companies do not owe fiduciary duties to minority shareholders, as compared, for example, to controlling shareholders in corporations incorporated in Delaware. Our public shareholders may have more difficulty in protecting their interests in connection with actions taken by our management, members of our board of directors or our principal shareholders than they would as shareholders of a corporation incorporated in the United States.

In addition, only persons who are registered as shareholders in our shareholder register are recognized under Singapore law as shareholders of our company. Only registered shareholders have legal standing to institute shareholder actions against us or otherwise seek to enforce their rights as shareholders. Investors in our shares who are not specifically registered as shareholders in our shareholder register (for example, where such shareholders hold shares indirectly through the Depository Trust Company) are required to become registered as shareholders in our shareholder register in order to institute or enforce any legal proceedings or claims against us, our directors or our executive officers relating to shareholder rights. Holders of book-entry interests in our shares may become registered shareholders by exchanging their book-entry interests in our shares for certificated shares and being registered in our shareholder register. See “Comparison of Shareholder Rights” in this prospectus for a discussion of differences between Singapore and Delaware corporation law.

We are subject to the laws of Singapore, which differ in certain material respects from the laws of the United States.

As a company incorporated under the laws of the Republic of Singapore, we are required to comply with the laws of Singapore, certain of which are capable of extra-territorial application, as well as our memorandum and articles of association. In particular, we are required to comply with certain provisions of the Securities and Futures Act of Singapore (Cap 289), or the SFA, which prohibit certain forms of market conduct and information disclosures, and impose criminal and civil penalties on corporations, directors and officers in respect of any breach of such provisions. We are also required to comply with the Singapore Code on Take-Overs and Mergers, or the Singapore Takeover Code, which specifies, among other things, certain circumstances in which a general offer is to be made upon a change in effective control, and further specifies the manner and price at which voluntary and mandatory general offers are to be made.

The laws of Singapore and of the United States differ in certain significant respects. The rights of our shareholders and the obligations of our directors and officers under Singapore law are different from those applicable to a company incorporated in the State of Delaware in material respects, and our shareholders may have more difficulty and less clarity in protecting their interests in connection with actions taken by our management, members of our

board of directors or our controlling shareholders than would otherwise apply to a company incorporated in the State of Delaware. See “Comparison of Shareholder Rights” in this prospectus for a discussion of differences between Singapore and Delaware corporation law.

In addition, the application of Singapore law, in particular, the Companies Act of Singapore (Cap 50), or the Singapore Companies Act, may in certain circumstances impose more restrictions on us and our shareholders, directors and officers than would otherwise be applicable to a company incorporated in the State of Delaware. For example, the Singapore Companies Act requires directors to act with a reasonable degree of diligence and, in certain circumstances, imposes criminal liability for specified contraventions of particular statutory requirements or prohibitions. In addition, pursuant to the provisions of the Singapore Companies Act, shareholders holding 10% or more of the total number of paid-up shares carrying the right of voting in general meetings may require the convening of an extraordinary general meeting of shareholders by our directors. If our directors fail to comply with such request within 21 days of the receipt thereof, shareholders holding more than 50% of the voting rights represented by the original requisitioning shareholders may proceed to convene such meeting, and we will be liable for the reasonable expenses incurred by such requisitioning shareholders. We are also required by the Singapore Companies Act to deduct corresponding amounts from fees or other remuneration payable by us to such non-complying directors.

We are subject to the Singapore Takeover Code, which requires a person acquiring 30% or more of our voting shares to conduct a takeover offer for all of our voting shares. This could have the effect of discouraging, delaying or preventing a merger or acquisition and limit the market price of our ordinary shares.

We are subject to the Singapore Takeover Code. The Singapore Takeover Code contains provisions that may delay, deter or prevent a future takeover or change in control of our company and limit the market price of our ordinary shares for so long as we remain a public company with more than 50 shareholders and net tangible assets of S$5 million or more. For example, under the Singapore Takeover Code, any person acquiring, whether by a series of transactions over a period of time or not, either on his own or together with parties acting in concert with him, 30% or more of our voting shares, or if such person holds, either on his own or together with parties acting in concert with him, between 30% and 50% (both inclusive) of our voting shares, and if he (or parties acting in concert with him) acquires additional voting shares representing more than 1% of our voting shares in any six-month period, must, except with the consent of Securities Industry Council in Singapore, extend a takeover offer for our remaining voting shares in accordance with the Singapore Takeover Code. Therefore, any investor seeking to acquire a significant stake in our company may be deterred from doing so if, as a result, such investor would be required to conduct a takeover offer for all of our voting shares.

These same provisions could discourage potential investors from acquiring a stake or making a significant investment in our company and may substantially impede the ability of our shareholders to benefit from a change of effective control and, as a result, may adversely affect the market price of our ordinary shares and the ability to realize any benefits from a potential change of control.

For a limited period of time, our directors have general authority to allot and issue new shares on terms and conditions and with any preferences, rights or restrictions as may be determined by our board of directors in its sole discretion.

Under Singapore law, we may only allot and issue new shares with the prior approval of our shareholders in a general meeting. We expect that prior to the completion of this offering our shareholders will provide our directors with a general authority to allot and issue any number of new shares (whether as ordinary shares or preferred shares) until the earliest of (i) the conclusion of our 2015 annual general meeting of shareholders, (ii) the expiration of the period within which the next annual general meeting is required to be held (i.e., within 15 months from the conclusion of the last general meeting) and (iii) the subsequent revocation or modification of such general authority by our shareholders acting at an extraordinary general meeting duly convened for such purpose. Subject to the general requirements of the Singapore Companies Act and our memorandum and articles of association, the general authority given to our directors by our shareholders to allot and issue shares may be exercised by our directors to allot and issue shares on such terms and conditions as they deem fit to impose. Any additional issuances of new shares by our directors may dilute your interest in our ordinary shares and/or adversely impact the market price of our ordinary shares. See “Description of Share Capital—New Shares.”

We may be or become a passive foreign investment company, or a PFIC, which could result in adverse U.S. federal income tax consequences to U.S. Holders.

The rules governing passive foreign investment companies, or PFICs, can have adverse effects for U.S. federal income tax purposes. The tests for determining PFIC status for a taxable year depend upon the relative values of certain categories of assets and the relative amounts of certain kinds of income. The determination of whether we are a PFIC depends on the particular facts and circumstances (such as the valuation of our assets, including goodwill and other intangible assets) and may also be affected by the application of the PFIC rules, which are subject to differing interpretations. The fair market value of our assets is expected to relate, in part, to (a) the market price of our ordinary shares and (b) the composition of our income and assets, which will be affected by how, and how quickly, we spend any cash that is raised in any financing transaction, including this offering. Moreover, our ability to earn specific types of income that we currently treat as non-passive for purposes of the PFIC rules is uncertain with respect to future years. Based on the current and anticipated value of our assets and the composition of our income and assets, we do not expect to be treated as a PFIC for our current taxable year ending December 31, 2015; however, there can be no assurance that we will not be considered a PFIC for any taxable year.

If we are a PFIC, a U.S. Holder (as defined in the section titled “Material Tax Considerations”) would be subject to adverse U.S. federal income tax consequences, such as ineligibility for any preferred tax rates on capital gains or on actual or deemed dividends, interest charges on certain taxes treated as deferred, and additional reporting requirements under U.S. federal income tax laws and regulations. A U.S. Holder may in certain circumstances mitigate adverse tax consequences of the PFIC rules by filing an election to treat the PFIC as a qualified electing fund, or QEF, or, if shares of the PFIC are “marketable stock” for purposes of the PFIC rules, by making a mark-to-market election with respect to the shares of the PFIC. We do not intend to comply with the reporting requirements necessary to permit U.S. Holders to elect to treat us as a QEF. If a U.S. Holder makes a mark-to-market election with respect to its ordinary shares, the U.S. Holder is required to include annually in its U.S. federal taxable income an amount reflecting any year end increase in the value of its ordinary shares.

Investors should consult their own tax advisors regarding all aspects of the application of the PFIC rules to the ordinary shares. For more information related to classification as a PFIC and the elections available to a U.S. Holder, see “Material Tax Considerations—Material U.S. Federal Income Tax Considerations—Passive Foreign Investment Company.”

Singapore taxes may differ from the tax laws of other jurisdictions.

Prospective investors should consult their tax advisers concerning the overall tax consequences of purchasing, owning and disposing of our shares. Singapore tax law may differ from the tax laws of other jurisdictions, including the United States. See “Material Tax Considerations—Material Singapore Tax Considerations.”

We may become subject to unanticipated tax liabilities.

We are incorporated under the laws of Singapore. We may, however, become subject to income, withholding or other taxes in certain jurisdictions by reason of our activities and operations, and it is also possible that taxing authorities in any such jurisdictions could assert that we are subject to greater taxation than we currently anticipate. Any such non-Singaporean tax liability could materially adversely affect our results of operations.

Taxing authorities could reallocate our taxable income among our subsidiaries, which could increase our overall tax liability.

We are organized in Singapore, and we currently have a subsidiary in the United States and Japan. If we succeed in growing our business, we expect to conduct increased operations through our subsidiaries in various tax jurisdictions pursuant to transfer pricing arrangements between us and our subsidiaries. If two or more affiliated companies are located in different countries, the tax laws or regulations of each country generally will require that transfer prices be the same as those between unrelated companies dealing at arms’ length and that appropriate documentation is maintained to support the transfer prices. While we are revising our transfer pricing policies to come into compliance with applicable transfer pricing laws, we may not amend returns for prior years, and even our new transfer pricing procedures are not binding on applicable tax authorities.

If tax authorities in any of these countries were to successfully challenge our transfer prices as not reflecting arms’ length transactions, they could require us to adjust our transfer prices and thereby reallocate our income to reflect

these revised transfer prices, which could result in a higher tax liability to us. In addition, if the country from which the income is reallocated does not agree with the reallocation, both countries could tax the same income, resulting in double taxation. If tax authorities were to allocate income to a higher tax jurisdiction, subject our income to double taxation or assess interest and penalties, it would increase our consolidated tax liability, which could adversely affect our financial condition, results of operations and cash flows.

Risks Related to this Offering and Our Ordinary Shares

Investors in this offering will pay a much higher price than the book value of our ordinary shares.

If you purchase ordinary shares in this offering, you will incur an immediate and substantial dilution of $ per share after giving effect to the sale by us of ordinary shares offered in this offering, based an assumed public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, and after deducting underwriting discounts and commissions for shares sold in the public offering and estimated offering expenses payable by us. See “Dilution.” In the past, we have issued options to acquire ordinary shares at prices significantly below this offering price. To the extent these outstanding options are ultimately exercised, you will incur additional dilution. Furthermore, if the underwriters exercise their option to purchase additional ordinary shares, you will also incur additional dilution.

No public market for our ordinary shares currently exists, and we do not know whether a market will develop or what the market price of our ordinary shares will be. As a result, it may be difficult for you to sell your ordinary shares.

Prior to this offering, there has been no public market for our ordinary shares. Although we have applied to list our ordinary shares on the NASDAQ Global Market, an active trading market for our shares may never develop or be sustained following this offering. If an active market for our ordinary shares does not develop, it may be difficult for you to sell shares you purchase in this offering without depressing the market price for the shares, or at all. The initial public offering price for our ordinary shares will be determined through negotiations with the underwriters and the negotiated price may not be indicative of the market price of our ordinary shares after this offering. As a result of these and other factors, you may not be able to sell your ordinary shares at or above the initial public offering price, or at all. Further, an inactive market may also impair our ability to raise capital by selling our ordinary shares and may impair our ability to enter into strategic partnerships or acquire companies or products by using our ordinary shares as consideration.

The market price of our ordinary shares is likely to be highly volatile, and you may lose some or all of your investment.

The market price of our ordinary shares following this offering is likely to be highly volatile, including in response to factors that are beyond our control. The stock market in general has recently experienced extreme price and volume fluctuations. In particular, the market prices of securities of pharmaceutical and biotechnology companies have been extremely volatile, and have experienced fluctuations that often have been unrelated or disproportionate to the operating performance of these companies. These broad market fluctuations could result in extreme fluctuations in the price of our ordinary shares, regardless of our operating performance. The market price of our ordinary shares may decline below the initial public offering price, and you may lose some or all of your investment.

We will incur increased costs as a result of operating as a public company, and our management will be required to devote substantial time to new compliance initiatives.

As a public company, we will incur significant legal, accounting and other expenses that we did not incur as a private company. We will be subject to the reporting and other requirements of the Securities Exchange Act of 1934, as amended, or the Exchange Act, the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, and the Dodd-Frank Wall Street Reform and Protection Act, as well as rules subsequently adopted by the SEC and the NASDAQ Stock Market. These rules and regulations will require, among other things, that we file annual, quarterly and current reports with respect to our business and financial condition and establish and maintain effective disclosure and financial controls and corporate governance practices. We expect these rules and regulations to substantially increase our legal and financial compliance costs and to make some activities more time-consuming and costly, particularly after we are no longer an “emerging growth company,” as defined in the recently enacted Jumpstart Our Business Startups Act of 2012, or the JOBS Act. Our management and other personnel will need to devote a substantial amount of time to these compliance initiatives. For example, we expect that these rules and regulations may make it more difficult and more expensive for us to obtain director and officer liability insurance, which could

make it more difficult for us to attract and retain qualified members of our board of directors. We cannot predict or estimate the amount of additional costs we will incur as a public company or the timing of such costs.

We may take advantage of specified reduced disclosure requirements applicable to an "emerging growth company" under the JOBS Act, and the information that we provide to shareholders may be different than they might receive from other public companies.

We are an "emerging growth company," as defined under the JOBS Act. As an emerging growth company, we may take advantage of specified reduced disclosure and other requirements that are otherwise applicable generally to public companies. These provisions include:

- Only two years of audited financial statements in addition to any required unaudited interim financial statements with correspondingly reduced "Management's Discussion and Analysis of Financial Condition and Results of Operations" disclosure.
- Reduced disclosure about our executive compensation arrangements.
- No non-binding advisory votes on executive compensation or golden parachute arrangements.
- Exemption from the auditor attestation requirement in the assessment of our internal control over financial reporting.

We intend to take advantage of certain of the exemptions provided under the JOBS Act. We may continue to take advantage of exemptions under the JOBS Act for up to five years or such earlier time that we are no longer an emerging growth company. We would cease to be an emerging growth company if we have more than $1 billion in annual revenues, we have more than $700 million in market value of our shares held by non-affiliates, or we issue more than $1 billion of non-convertible debt over a three-year period. We may choose to take advantage of some but not all of these reduced burdens. We have taken advantage of these reduced reporting burdens in this prospectus, and may continue to do so in future filings. Therefore, the information that we provide shareholders may be different than you might get from other public companies in which you hold stock. Further, if some investors find our ordinary shares less attractive as result, there may be a less active trading market for our ordinary shares and the market price of our ordinary shares may be more volatile.

Our management will have broad discretion over the use of the net proceeds from this offering, you may not agree with how we use the proceeds and the proceeds may not be used effectively.

Our management will have broad discretion as to the use of the net proceeds from any offering by us and could use them for purposes other than those contemplated at the time of this offering. Accordingly, you may be relying on the judgment of our management with regard to the use of these net proceeds, and you will not have the opportunity, as part of your investment decision, to assess whether the proceeds are being used appropriately. It is possible that the proceeds will be invested in a way that does not yield a favorable, or any, return for our company.

We have identified a material weakness in our internal control over financial reporting and may identify additional material weaknesses in the future or otherwise fail to maintain an effective system of internal controls, which may result in material misstatements of our financial statements or cause us to fail to meet our periodic reporting obligations.

Prior to this offering, we were a private company and had limited accounting and financial reporting personnel and other resources with which to address our internal controls and procedures. In connection with the audit of our consolidated financial statements for the years ended December 31, 2013 and 2014, we and our independent registered public accounting firm identified a material weakness in our internal control over financial reporting. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis. Our lack of adequate accounting personnel has resulted in the identification of a material weakness in our internal controls over financial reporting. Specifically, we did not appropriately design and implement controls over the review and approval of manual journal entries and the related supporting journal entry calculations.

To address this material weakness, we plan to hire additional accounting personnel and implement management review controls. While we intend to implement a plan to remediate this material weakness, we cannot predict the success of such plan or the outcome of our assessment of these plans at this time. We can give no assurance that this

implementation will remediate this deficiency in internal control or that additional material weaknesses or significant deficiencies in our internal control over financial reporting will not be identified in the future. Our failure to implement and maintain effective internal control over financial reporting could result in errors in our financial statements that could result in a restatement of our financial statements, cause us to fail to meet our reporting obligations.

As a result of becoming a public company, we will be obligated to develop and maintain proper and effective internal controls over financial reporting and any failure to maintain the adequacy of these internal controls may adversely affect investor confidence in our company and, as a result, the value of our ordinary shares.

We will be required, pursuant to Section 404 of the Sarbanes-Oxley Act, or Section 404, to furnish a report by management on the effectiveness of our internal control over financial reporting for the first fiscal year beginning after the effective date of this offering. This assessment will need to include disclosure of any material weaknesses identified by our management in our internal control over financial reporting. Our independent registered public accounting firm will not be required to attest to the effectiveness of our internal control over financial reporting until our first annual report required to be filed with the SEC following the date we are no longer an "emerging growth company," as defined in the JOBS Act. At such time as we are required to obtain auditor attestation, if we then have a material weakness, we would receive an adverse opinion regarding our internal control over financial reporting from our independent registered accounting firm.

We are beginning the costly and challenging process of compiling the system and processing documentation necessary to perform the evaluation needed to comply with Section 404, and we may not be able to complete our evaluation, testing and any required remediation in a timely fashion. Our compliance with Section 404 will require that we incur substantial accounting expense and expend significant management efforts. We currently do not have an internal audit group, and we will need to hire additional accounting and financial staff with appropriate public company experience and technical accounting knowledge and compile the system and process documentation necessary to perform the evaluation needed to comply with Section 404.

During our evaluation of our internal control, if we identify one or more material weaknesses in our internal control over financial reporting, we will be unable to assert that our internal control over financial reporting is effective. We cannot assure you that there will not be material weaknesses or significant deficiencies in our internal control over financial reporting in the future. Any failure to maintain internal control over financial reporting could severely inhibit our ability to accurately report our financial condition or results of operations. If we are unable to conclude that our internal control over financial reporting is effective, or if our independent registered public accounting firm determines we have a material weakness or significant deficiency in our internal control over financial reporting, we could lose investor confidence in the accuracy and completeness of our financial reports, the market price of our ordinary shares could decline, and we could be subject to sanctions or investigations by NASDAQ, the SEC or other regulatory authorities. Failure to remedy any material weakness in our internal control over financial reporting, or to implement or maintain other effective control systems required of public companies, could also restrict our future access to the capital markets.

Our principal shareholders and management own a significant percentage of our ordinary shares and will be able to exert significant control over matters subject to shareholder approval.

Based on the beneficial ownership of our ordinary shares as of June 30, 2015, after this offering, our executive officers and directors, together with holders of 5% or more of our outstanding ordinary shares before this offering (assuming the conversion of all of our outstanding preferred shares into ordinary shares) and their respective affiliates, will beneficially own approximately % of our outstanding ordinary shares (assuming no exercise of the underwriters' option to purchase additional ordinary shares). As a result, these shareholders, if acting together, will continue to have significant influence over the outcome of corporate actions requiring shareholder approval, including the election of directors, any merger, consolidation or sale of all or substantially all of our assets and any other significant corporate transaction. The interests of these shareholders may not be the same as or may even conflict with your interests. For example, these shareholders could delay or prevent a change of control of our company, even if such a change of control would benefit our other shareholders, which could deprive shareholders of an opportunity to receive a premium for their ordinary shares as part of a sale of our company or our assets and might affect the prevailing market price of our ordinary shares. The significant concentration of share ownership may adversely affect the trading price of our ordinary shares due to investors' perception that conflicts of interest may exist or arise.

In addition, certain of our existing shareholders and their affiliated entities, including affiliates of our directors, have indicated an interest in purchasing up to an aggregate of approximately $ million of our ordinary shares in this offering at the initial public offering price, which would increase the beneficial ownership of our principal shareholders and management. However, because indications of interest are not binding agreements or commitments to purchase, the underwriters could determine to sell more, less or no shares to any of these existing shareholders and their affiliated entities and any of these existing shareholders and affiliated entities could determine to purchase more, less or no shares in this offering. Accordingly, the foregoing discussion does not reflect any potential purchases by these parties.

We do not anticipate paying any cash dividends on our ordinary shares in the foreseeable future.

We have never declared or paid cash dividends on our ordinary shares. We currently intend to retain all of our future earnings, if any, to finance the growth and development of our business, and we do not anticipate paying any cash dividends on our ordinary shares in the foreseeable future. In addition, the terms of any future debt agreements may preclude us from paying dividends. As a result, capital appreciation, if any, of our ordinary shares will be your sole source of gain for the foreseeable future.

We may incur significant costs from class action litigation due to share volatility.

Our share price may fluctuate for many reasons, including as a result of public announcements regarding the progress of our development efforts or the development efforts of our collaborators and/or competitors, the addition or departure of our key personnel, variations in our quarterly operating results and changes in market valuations of pharmaceutical and biotechnology companies. Holders of stock which has experienced significant price and trading volatility have occasionally brought securities class action litigation against the companies that issued the stocks. If any of our shareholders were to bring a lawsuit of this type against us, even if the lawsuit is without merit, we could incur substantial costs defending the lawsuit. The lawsuit could also divert the time and attention of our management, which could harm our business.

Sales of additional ordinary shares could cause the price of our ordinary shares to decline.

Sales of substantial amounts of our ordinary shares in the public market, or the availability of such shares for sale, by us or others, including the issuance of ordinary shares upon exercise of outstanding options, could adversely affect the price of our ordinary shares. In connection with this offering, we, our directors and officers and certain of our existing shareholders have entered into lock-up agreements for a period of 180 days following this offering. We, our directors, officers or our shareholders may be released from lock-up prior to the expiration of the lock-up period at the sole discretion of Jefferies LLC and Leerink Partners LLC. See “Underwriting.” Upon expiration or earlier release of the lock-up, we, our directors, officers or our shareholders may sell shares into the market, which could adversely affect the market price of our ordinary shares.

After this offering, certain of our shareholders will have the right to require us to register the sales of their shares under the Securities Act of 1933, as amended, under agreements between us and such shareholders. See “Description of Share Capital—Registration Rights” for a more detailed description of these rights.

If securities or industry analysts do not publish research or publish inaccurate or unfavorable research about our business, our share price and trading volume could decline.

The trading market for our ordinary shares will depend in part on the research and reports that securities or industry analysts publish about us or our business. Securities and industry analysts do not currently, and may never, publish research on our company. If no or too few securities or industry analysts commence coverage of our company, the trading price for our ordinary shares would likely be negatively impacted. In the event securities or industry analysts initiate coverage, if one or more of the analysts who cover us downgrade our ordinary shares or publish inaccurate or unfavorable research about our business, our share price would likely decline. If one or more of these analysts cease coverage of our company or fail to publish reports on us regularly, demand for our ordinary shares could decrease, which might cause our share price and trading volume to decline.

ENFORCEMENT OF CIVIL LIABILITIES UNDER UNITED STATES FEDERAL SECURITIES LAWS

We are incorporated under the laws of the Republic of Singapore, and certain of our officers and directors are residents outside the United States. Moreover, a majority of our consolidated assets are located outside the United States. Although we are incorporated outside the United States, we have agreed to accept service of process in the United States through our agent designated for that purpose. Nevertheless, since a majority of the consolidated assets owned by us are located outside the United States, any judgment obtained in the United States against us may not be collectible within the United States. There is no treaty between the United States and Singapore providing for the reciprocal recognition and enforcement of judgments in civil and commercial matters and a final judgment for the payment of money rendered by any federal or state court in the United States based on civil liability, whether or not predicated solely upon the federal securities laws, would, therefore, not be automatically enforceable in Singapore.

It is not clear whether a Singapore court may impose civil liability on us or our directors and officers who reside in Singapore in a suit brought in the Singapore courts against us or such persons with respect to a violation solely of the federal securities laws of the United States. In making a determination as to enforceability of a foreign judgment, the Singapore courts would have regard to whether the judgment was final and conclusive, given by a court of competent jurisdiction, and was expressed to be for a fixed sum of money. In general, a foreign judgment would be enforceable in Singapore unless procured by fraud, or the proceedings in which such judgments were obtained were not conducted in accordance with principles of natural justice, or the enforcement thereof would be contrary to public policy, or if the judgment would conflict with earlier judgment(s) from Singapore or earlier foreign judgment(s) recognized in Singapore, or if the judgment would amount to the direct or indirect enforcement of foreign penal, revenue or other public laws.

Accordingly, there can be no assurance that the Singapore courts would enforce against us, our directors or our officers resident in Singapore judgments obtained in the United States which are predicated upon the civil liability provisions of the federal securities laws of the United States. In addition, holders of book-entry interests in our shares will be required to exchange such interests for certificated shares and to be registered as shareholders in our shareholder register in order to have standing to bring a shareholder suit and, if successful, to enforce a foreign judgment against us, our directors or our executive officers in the Singapore courts.

A holder of book-entry interests in our shares may become a registered shareholder of our company by exchanging such holder’s interest in our shares for certificated shares and being registered in our shareholder register. The administrative process of becoming a registered shareholder could result in delays prejudicial to any legal proceeding or enforcement action.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements that involve substantial risks and uncertainties. The forward-looking statements are contained principally in the sections titled “Prospectus Summary,” “Risk Factors,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and “Business,” but are also contained elsewhere in this prospectus. In some cases, you can identify forward-looking statements by the words “anticipate,” “believe,” “continue,” “could,” “estimate,” “expect,” “future,” “goals,” “intend,” “likely,” “may,” “might,” “ongoing,” “objective,” “plan,” “potential,” “predict,” “project,” “seek,” “should,” “strategy,” “will” and “would” or the negative of these terms, or other comparable terminology intended to identify statements about the future. These statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from the information expressed or implied by these forward-looking statements. Although we believe that we have a reasonable basis for each forward-looking statement contained in this prospectus, we caution you that these statements are based on a combination of facts and factors currently known by us and our expectations of the future, about which we cannot be certain. Forward-looking statements include statements about:

- our ability to fund our working capital requirements;
- our success, cost and timing of our product development activities and future clinical trials;
- the timing of and our ability to obtain and maintain regulatory approvals for any of our product candidates;
- our ability to identify and develop new product candidates;
- our intellectual property position;
- our commercialization, marketing and manufacturing capabilities and strategy;
- our use of proceeds from this offering;
- our ability to develop sales and marketing capabilities;
- our estimates regarding future expenses and needs for additional financing;
- our ability to identify, recruit and retain key personnel;
- our financial performance; and
- developments and projections relating to our competitors in the industry.

You should refer to the “Risk Factors” section of this prospectus for a discussion of important factors that may cause our actual results to differ materially from those expressed or implied by our forward-looking statements. As a result of these factors, we cannot assure you that the forward-looking statements in this prospectus will prove to be accurate. Furthermore, if our forward-looking statements prove to be inaccurate, the inaccuracy may be material. In light of the significant uncertainties in these forward-looking statements, you should not regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified time frame, or at all. We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law. The Private Securities Litigation Reform Act of 1995 and Section 27A of the Securities Act of 1933, as amended, do not protect any forward-looking statements that we make in connection with this offering. In addition, statements that “we believe” and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this prospectus, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain and investors are cautioned not to unduly rely upon these statements.

You should read this prospectus and the documents that we reference in this prospectus and have filed as exhibits to the registration statement, of which this prospectus is a part, completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of our forward-looking statements by these cautionary statements.

INDUSTRY AND MARKET DATA

Certain industry data and market data included in this prospectus were obtained from independent third-party surveys, market research, publicly available information, reports of governmental agencies and industry publications and surveys. All of management's estimates presented herein are based upon management's review of independent third-party surveys and industry publications prepared by a number of sources and other publicly available information. All of the market data used in this prospectus involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. We believe that the information from these industry publications and surveys that is included in this prospectus is reliable. The industry in which we operate is subject to a high degree of uncertainty and risk due to a variety of factors, including those described in the section titled "Risk Factors." These and other factors could cause results to differ materially from those expressed in the estimates made by the independent parties and by us.

USE OF PROCEEDS

We estimate that we will receive approximately $ million in net proceeds from the sale of our ordinary shares in this offering, or approximately $ million if the underwriters exercise their option to purchase additional ordinary shares in full, based upon the assumed initial public offering price of $ per share, the midpoint of the range set forth on the cover page of this prospectus, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us. Each $1.00 increase (decrease) in the assumed initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, would increase (decrease) the net proceeds to us from this offering by approximately $ million, or approximately $ million if the underwriters exercise their option to purchase additional ordinary shares in full, assuming that the number of shares offered by us remains the same and after deducting underwriting discounts and commissions. Similarly, each increase (decrease) of 1,000,000 shares in the number of shares offered by us would increase (decrease) the net proceeds to us from this offering by approximately $ million, assuming the assumed initial public offering price remains the same and after deducting underwriting discounts and commissions.

We intend to use the net proceeds from this offering as follows:

- approximately $14.0 million to fund additional preclinical studies and Phase 1 clinical trials for our HD HTT SNP-1 program;
- approximately $11.0 million to fund the selection of a lead product candidate and additional preclinical studies and Phase 1 clinical trials for our HD HTT SNP-2 program;
- approximately $12.0 million to fund additional preclinical studies and Phase 1 clinical trials for our DMD Exon 51 program; and
- approximately $13.0 million to fund the selection of a lead product candidate and additional preclinical studies and Phase 1 clinical trials for our IBD SMAD7 program.

The remainder of the net proceeds will be used to advance our discovery programs, to expand our pipeline, for working capital and for other general corporate purposes. We may also use a portion of the net proceeds to acquire, license and invest in complementary products, technologies or businesses; however, we currently have no agreements or commitments to do so.

As of the date of this prospectus, we cannot specify with certainty all of the particular uses for the net proceeds to be received upon the completion of this offering. The amount and timing of our actual expenditures may vary significantly depending upon numerous factors, including those described in the “Risk Factors” section of this prospectus. We may find it necessary or advisable to use the net proceeds for other purposes, and our management will retain broad discretion in the allocation of our net proceeds from this offering.

This expected use of net proceeds from this offering represents our intentions based upon our current plans and business conditions, which could change in the future as our plans and business conditions evolve. The amounts and timing of our actual expenditures may vary significantly depending on numerous factors, including the progress of our development activities, feedback from regulatory authorities, the status of and results from clinical trials, as well as any collaborations that we may enter into with third parties for our current and future product candidates, and any unforeseen cash needs. As a result, our management will retain broad discretion over the allocation of the net proceeds from this offering.

As of June 30, 2015, we had cash of $7.8 million. We believe that the net proceeds from this offering, together with the approximately $62.5 million in net proceeds raised from the sale and issuance of our Series B preferred shares in August 2015, and our cash and related interest we earn on these balances, will be sufficient to meet our anticipated cash requirements through at least 2017. We will need to raise substantial additional funds before we can expect to commercialize any products. We may satisfy our future cash needs through the sale of equity

securities, debt financings, working capital lines of credit, corporate collaborations or license agreements, grant funding, through interest income earned on cash balances or a combination of one or more of these sources.

Pending use of our net proceeds from this offering, we plan to invest the proceeds in a variety of capital preservation investments, including investment-grade, interest-bearing instruments. We cannot predict whether the net proceeds will yield a favorable return.

DIVIDEND POLICY

We have never declared or paid any dividends on our ordinary shares. We currently anticipate that we will retain any future earnings for the operation and expansion of our business. Accordingly, we do not currently anticipate declaring or paying any cash dividends on our ordinary shares for the foreseeable future. Any future determination relating to our dividend policy will be made at the discretion of our board of directors and will depend on then existing conditions, including our financial condition, results of operations, contractual restrictions (including in the agreements governing our credit facilities), capital requirements, business prospects and other factors our board of directors may deem relevant. We may, by ordinary resolution, declare dividends at a general meeting of shareholders, but we are restricted from paying dividends in excess of the amount recommended by our board of directors. In addition, pursuant to Singapore law and our articles of association, no dividends may be paid except out of our profits.

CAPITALIZATION

The table below reflects our cash and capitalization as of June 30, 2015:

- on an actual basis;
- on a pro forma basis to reflect (i) the sale by us of 1,320,000 Series B preferred shares in August 2015 for net proceeds of approximately $62.5 million; (ii) the conversion of all Series B preferred shares outstanding as of August 15, 2015 into an aggregate of 1,320,000 ordinary shares prior to the closing of this offering; and (iii) the effectiveness of our amended and restated memorandum and articles of association in connection with the closing of this offering; and
- on a pro forma basis, as adjusted to further reflect the sale of ordinary shares in this offering at an assumed initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

The following information is illustrative only of our capitalization following the closing of this offering and will change based on the actual initial public offering price and other terms of this offering determined at pricing. You should read this table together with the sections titled “Selected Consolidated Financial Data” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our consolidated financial statements and related notes included elsewhere in this prospectus.

	As of June 30, 2015		
	Actual	Pro Forma	Pro Forma As Adjusted
	(unaudited) (in thousands, except share data)		
Cash	$ 7,779	$ 70,279	$
Shareholders’ equity:			
Series B preferred shares, no par value, no shares issued and outstanding actual, pro forma and outstanding pro forma as adjusted	$ —	$ —	$ —
Series A preferred shares, no par value, 965,300 shares issued and outstanding actual, pro forma and pro forma as adjusted	7,874	7,874	
Ordinary shares, no par value, 2,282,123 shares issued and outstanding actual, 3,602,123 shares issued and outstanding pro forma, shares issued and outstanding pro forma as adjusted	22,446	84,946	
Additional paid-in capital	1,650	1,650	
Accumulated other comprehensive income	34	34	
Accumulated deficit	(23,041)	(23,041)	
Total shareholders’ equity	8,963	71,463	
Total capitalization	$ 11,596	$ 74,096	$

Each $1.00 increase (decrease) in the assumed initial public offering price of $ per share, the mid-point of the price range set forth on the cover page of this prospectus, would increase (decrease) each of cash, additional paid-in-capital and total shareholders’ equity and total capitalization by approximately $ million, assuming that the number of shares offered by us remains the same and after deducting underwriting discounts and commissions. Similarly, each increase (decrease) of 1,000,000 shares in the number of shares offered by us would increase (decrease) each of cash, additional paid-in capital and total shareholders’ equity by approximately $ million, assuming the assumed initial public offering price remains the same and after deducting underwriting discounts and commissions. The pro forma as adjusted presentation discussed above is illustrative only and will be adjusted based on the actual initial public offering price and other terms of this offering determined at pricing.

The tables and calculations above are based on the number of our ordinary shares outstanding as of June 30, 2015, and exclude:

- 456,449 ordinary shares issuable upon the exercise of options outstanding as of June 30, 2015, with an exercise price of $10.00 per share, plus 42,050 ordinary shares issuable upon the exercise of options granted subsequent to June 30, 2015, with a weighted average exercise price of $31.38 per share;
- 334,078 ordinary shares reserved for future issuance under our 2014 Plan as of October 9, 2015; and
- 965,300 outstanding Series A preferred shares which can be converted at any time on a one-for-one basis into ordinary shares at the discretion of the holder.

DILUTION

If you invest in our ordinary shares, your ownership interest will be diluted to the extent of the difference between the initial public offering price per share of our ordinary shares and the pro forma as adjusted net tangible book value per share of our ordinary shares after this offering. We calculate net tangible book value per share by dividing the net tangible book value, or tangible assets less total liabilities, by the number of outstanding ordinary shares of our share capital. Our historical net tangible book value as of June 30, 2015 was $8.3 million, or $3.63 per ordinary share.

Pro forma net tangible book value and pro forma net tangible book value per share represents the amount of our total tangible assets less our total liabilities, after giving effect to (i) the issuance and sale by us of 1,320,000 Series B preferred shares in August 2015 for net proceeds of approximately $62.5 million, (ii) the conversion of all of our outstanding Series B preferred shares into 1,320,000 ordinary shares prior to the closing of this offering and (iii) the voluntary conversion of the 965,300 outstanding Series A preferred shares which can be converted at any time on a one-for-one basis into ordinary shares at the sole discretion of the holder. Our pro forma net tangible book value at June 30, 2015 was $70.8 million, or $15.50 per share.

Our pro forma as adjusted net tangible book value represents our pro forma net tangible book value, plus the effect of the sale of ordinary shares by us at an assumed initial public offering price of $ per share (the midpoint of the price range set forth on the cover page of this prospectus), after deducting underwriting discounts and commissions and estimated offering expenses payable by us. Our pro forma as adjusted net tangible book value at June 30, 2015 was $ million, or $ per share. This amount represents an immediate increase in the pro forma as adjusted net tangible book value of $ per share to existing shareholders and an immediate dilution of $ per share to new investors purchasing shares at an assumed initial public offering price of $ per share.

The following table illustrates this dilution on a per share basis to new investors:

Assumed initial public offering price per share		$
Pro forma net tangible book value per share as of June 30, 2015	$15.50	
Increase in pro forma net tangible book value per share attributable to new investors		
Pro forma as adjusted net tangible book value per share after this offering		
Dilution in pro forma as adjusted net tangible book value per share to new investors		$

The dilution information discussed above is illustrative only and will change based on the actual initial public offering price and other terms of this offering determined at pricing. Each $1.00 increase (decrease) in the assumed initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, would increase (decrease) our pro forma as adjusted net tangible book value per share after this offering by $, and the dilution in pro forma as adjusted net tangible book value per share to investors by $, assuming the number of shares offered by us remains the same and after deducting underwriting discounts and commissions. Similarly, each increase (decrease) of 1,000,000 shares in the number of shares offered by us would increase (decrease) our pro forma as adjusted net tangible book value per share after this offering by $, and the dilution in pro forma as adjusted net tangible book value per share to new investors by $, assuming the assumed initial public offering price remains the same and after deducting underwriting discounts and commissions.

If the underwriters exercise in full their option to purchase additional ordinary shares in this offering, the pro forma as adjusted net tangible book value per share after the offering would be $ per share, the increase in the pro forma as adjusted net tangible book value per share to existing shareholders would be $ per share and the dilution in pro forma as adjusted net tangible book value per share to new investors purchasing ordinary shares in this offering would be $ per share.

The following table summarizes, as of June 30, 2015, on a pro forma as adjusted basis as described above the number of ordinary shares we issued and sold, the total consideration paid and the average price per share paid by existing shareholders and new investors purchasing ordinary shares in this offering. The table is based upon the assumed initial public offering price of $ per share (the midpoint of the price range set forth on the cover page of this prospectus), before deducting underwriting discounts and commissions and estimated expenses payable by us.

	Shares Purchased		Total Consideration		Average Price Per Share
	Number	Percentage	Amount	Percentage	
Existing shareholders		%	$	%	$
New investors participating in this offering					
Total		100.0%	$	100.0%	

Except as otherwise indicated, the discussion and tables above assume no exercise of the underwriters' option to purchase additional shares. If the underwriters' option to purchase additional shares is exercised in full, our existing shareholders would own approximately % and our new investors would own approximately % of the total number of our ordinary shares outstanding after this offering.

The information discussed above excludes:

- 456,449 ordinary shares issuable upon the exercise of options outstanding as of June 30, 2015, with an exercise price of $10.00 per share, plus 42,050 ordinary shares issuable upon the exercise of options granted subsequent to June 30, 2015, with a weighted average exercise price of $31.38 per share; and
- 334,078 ordinary shares reserved for future issuance under our 2014 Plan as of October 9, 2015.

To the extent that any options or other equity incentive grants are issued in the future or we issue additional ordinary shares in the future, there will be further dilution to investors participating in this offering. In addition, we may choose to raise additional capital because of market considerations or strategic considerations, even if we believe that we have sufficient funds for our current or future operating plans. If we raise additional capital through the sale of equity or convertible securities, the issuance of these securities could result in further dilution to our shareholders.

SELECTED CONSOLIDATED FINANCIAL DATA

You should read the following selected consolidated financial data together with our consolidated financial statements and the related notes included elsewhere in this prospectus and the "Management's Discussion and Analysis of Financial Condition and Results of Operations" section of this prospectus. We have derived the selected consolidated statements of operations data for the years ended December 31, 2013 and 2014 and the selected consolidated balance sheet data as of December 31, 2013 and 2014 from our audited consolidated financial statements appearing elsewhere in this prospectus. The selected consolidated statements of operations data for the six months ended June 30, 2014 and 2015 and the selected consolidated balance sheet data as of June 30, 2015 have been derived from our unaudited consolidated financial statements appearing elsewhere in this prospectus and have been prepared on the same basis as our audited consolidated financial statements. In the opinion of management, the unaudited data reflects all adjustments, consisting only of normal recurring adjustments, necessary for a fair presentation of the consolidated financial information in those statements. Our consolidated historical results are not necessarily indicative of the results that should be expected in the future, and our consolidated results for the six months ended June 30, 2015 are not necessarily indicative of the results that should be expected for the full year ending December 31, 2015.

	Year Ended December 31,		Six Months Ended June 30,	
	2013	2014	2014	2015
			(unaudited)	
	(in thousands, except share and per share data)			
Consolidated Statements of Operations Data:				
Revenue	$ —	$ —	$ —	$ 152
Operating expenses:				
Research and development	1,920	2,395	1,087	3,457
General and administrative	1,654	2,999	1,173	3,789
Total operating expenses	3,574	5,394	2,260	7,246
Loss from operations	(3,574)	(5,394)	(2,260)	(7,094)
Other (expense) income:				
Interest expense	(111)	(12)	(12)	(15)
Other, net	37	261	215	43
Total other (expense) income	(74)	249	203	28
Loss before income taxes	(3,648)	(5,145)	(2,057)	(7,066)
Income tax benefit (provision)	330	(84)	(60)	(99)
Net loss	$ (3,318)	$ (5,229)	$ (2,117)	$ (7,165)
Net loss per share attributable to ordinary shareholders—basic and diluted (1)	$ (7.69)	$ (5.40)	$ (2.41)	$ (3.32)
Weighted-average ordinary shares used in computing net loss per share attributable to ordinary shareholders—basic and diluted (1)	431,270	967,894	879,265	2,159,811

(1) See Note 10 to our consolidated financial statements appearing elsewhere in this prospectus for further details on the calculation of net loss per share attributable to ordinary shareholders, basic and diluted.

	As of December 31,		As of June 30, 2015
	2013	2014	(unaudited)
Consolidated Balance Sheet Data:		(in thousands)	
Cash	$ 439	$ 1,048	$ 7,779
Working (deficit) capital	(9,270)	605	6,134
Total assets	2,323	2,938	11,596
Total liabilities	10,085	911	2,633
Accumulated deficit	(10,647)	(15,876)	(23,041)
Total shareholders' (deficit) equity	(7,762)	2,027	8,963

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion and analysis of financial condition and results of operations together with the section titled "Selected Consolidated Financial Data" and our consolidated financial statements and related notes included elsewhere in this prospectus. This discussion and other parts of this prospectus contain forward-looking statements that involve risks and uncertainties, such as statements regarding our plans, objectives, expectations, intentions and projections. Our actual results could differ materially from those discussed in these forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those discussed in the "Risk Factors" section of this prospectus. All references in this "Management's Discussion and Analysis of Financial Condition and Results of Operations" to 2013 and 2014 are references our fiscal years ended December 31, 2013 and 2014, respectively.

Overview

We are a preclinical biopharmaceutical company with an innovative and proprietary synthetic chemistry drug development platform that we are using to design, develop and commercialize a broad pipeline of first-in-class or best-in-class nucleic acid therapeutic candidates. Nucleic acid therapeutics have the potential to address diseases that have been difficult to treat with small molecule drugs or biologics and have emerged as a large and promising class of drugs. We are initially developing nucleic acid therapeutics that target genetic defects to either reduce the expression of disease-promoting proteins or transform the production of dysfunctional mutant proteins into the production of functional proteins. Our platform is driven by our innovative and proprietary stereochemistry technology, enabling us to rationally design, optimize and manufacture stereopure nucleic acid therapeutics, which we believe possess drug properties that are superior to the stereoisomer mixtures of oligonucleotides currently on the market or in development by others. Building upon the innovative work of our scientific founders, Gregory L. Verdine, Ph.D. and Takeshi Wada, Ph.D., we have demonstrated the benefits of our stereopure nucleic acid therapeutics in preclinical studies. Our platform can be used to design therapies that utilize any of the major molecular mechanisms employed by nucleic acid therapeutics, including antisense, ribonucleic acid interference, or RNAi, exon skipping and others.

Our most advanced therapeutic programs are in Huntington's disease, Duchenne muscular dystrophy, or DMD, and inflammatory bowel disease, or IBD. In Huntington's disease, we have programs targeting HTT SNP-1 and HTT SNP-2; in DMD, we are targeting Exon 51; and in IBD, we are targeting SMAD7. We have product candidates in our programs targeting HTT SNP-1 and Exon 51, and we expect to select lead candidates in our HTT SNP-2 and SMAD7 programs in late 2015 and early 2016, respectively. We expect to file investigational new drug applications, or INDs, with the U.S. Food and Drug Administration, or FDA, for each of these candidates in 2016 and early 2017. We also have late-stage discovery programs in epidermolysis bullosa simplex, in which we are targeting KRT14 SNP-1 and KRT14 SNP-2, and in DMD, in which we are focused on an additional DMD target, AcRIIb. We expect to identify lead candidates for these programs in 2016. We believe that, based on our initial selection criteria of novel and fast-follower opportunities, our platform can potentially be used in the near-term to design treatments for approximately 25 other potential target indications, mostly consisting of orphan indications, with an initial focus on orphan neuromuscular and central nervous system disease targets.

Since our inception in 2012, we have devoted substantially all of our resources to developing an innovative and proprietary synthetic chemistry drug development platform that we are using to design, develop and commercialize nucleic acid therapeutic candidates, building our intellectual property portfolio, developing our supply chain, business planning, raising capital and providing general and administrative support for these operations. To date, we have not generated any product revenue and we have primarily financed our operations through sales of our securities.

We have never been profitable, and since our inception, we have incurred significant operating losses. Our net loss was $3.3 million in 2013, $5.2 million in 2014, and $2.1 million and $7.2 million in the six months ended June 30, 2014 and 2015, respectively. As of December 31, 2014 and June 30, 2015, we had an accumulated deficit of $15.9 million and $23.0 million, respectively. We expect to incur significant expenses and increasing operating losses for the foreseeable future.

Financial Operations Overview

Revenue

We have not generated any product revenue since our inception and do not expect to generate any revenue from the sale of products for the foreseeable future. Our revenue during the six months ended June 30, 2015 consisted of a payment received for research and development services under an agreement that was terminated in May 2015. We are not a party to any other license or collaboration agreements that have generated revenue as of June 30, 2015.

Operating Expenses

Our operating expenses since inception have consisted primarily of research and development costs and general and administrative costs.

Research and Development Expenses

Research and development expenses consist primarily of costs incurred for our research activities, including our discovery efforts, and the development of our product candidates, which include:

- expenses incurred under agreements with third parties, including contract research organizations, or CROs, that conduct research and preclinical activities on our behalf, as well as contract manufacturing organizations, or CMOs, that manufacture drug products for use in our preclinical trials;
- employee salaries, benefits and other related costs, including share-based compensation expense, for personnel in our research and development organization;
- costs of third-party consultants, including fees, share-based compensation and related travel expenses;
- the cost of sponsored research, which includes laboratory supplies and facility-related expenses, including rent, maintenance and other operating costs; and
- costs related to compliance with regulatory requirements.

We recognize research and development costs as incurred and are reflected in our financial statements as prepaid or accrued research and development expenses. We recognize external development costs based on an evaluation of the progress to completion of specific tasks using information provided to us by our vendors. Payments for these activities are based on the terms of the individual agreements, which may differ from the pattern of costs incurred, and are reflected in our financial statements as prepaid or accrued research and development expenses.

Our primary research and development focus since inception has been the development of our innovative and proprietary synthetic chemistry drug development platform. We are using our platform to design, develop and commercialize a broad pipeline of nucleic acid therapeutic candidates.

Our direct research and development expenses are tracked on a program-by-program basis and consist primarily of certain external costs, consultants and CROs in connection with our preclinical studies and regulatory fees. We do not allocate the cost of sponsored research, which includes laboratory supplies and facility-related expenses, including rent, maintenance and other operating costs, because these costs are deployed across multiple product programs under development and, as such, are classified as costs of our research.

The table below summarizes our research and development expenses incurred on our platform and by program.

	Year Ended December 31,		Six Months Ended June 30,	
	2013	2014	2014	2015
			(unaudited)	
	(in thousands)			
HD HTT SNP-1 and HD HTT SNP-2 programs (1)	$ —	$ —	$ —	$ 215
DMD Exon 51 program	—	—	—	188
IBD SMAD7 program	—	—	—	149
Discovery programs	—	—	—	203
Platform development and identification of potential drug discovery candidates	1,920	2,395	1,087	2,702
Total research and development expenses	$1,920	$2,395	$1,087	$3,457

(1) Given the nature of program development for these programs, the costs incurred in such programs have been common to both programs and therefore are not subject to separability. We expect that upon the filing of an IND with respect to the lead product candidate in each such program and the initiation of clinical studies for each such candidate, the costs incurred for each such candidate will be separate and distinct.

Product candidates in later stages of clinical development generally have higher development costs than those in earlier stages of clinical development, primarily due to the increased size and duration of later-stage clinical trials. We expect that our research and development expenses will continue to increase in the foreseeable future as we initiate clinical trials for certain product candidates, continue to discover and develop additional product candidates, and pursue later stages of clinical development of product candidates.

General and Administrative Expenses

General and administrative expenses consist primarily of salaries, bonus and other related costs, including share-based compensation, for personnel in our executive, finance, corporate and business development and administrative functions. General and administrative expenses also include legal fees relating to patent and corporate matters; professional fees for accounting, auditing, tax and consulting services; insurance costs; travel expenses; and facility-related expenses, which include rent and maintenance of our corporate offices; and other operating costs.

We anticipate that our general and administrative expenses will increase in the future, in the form of additional compensation, including salaries, benefits, incentive arrangements and share-based compensation awards, as we increase our headcount to support the expected growth in our research and development activities and the potential commercialization of our product candidates. Additionally, we expect our rent costs to increase as we move our U.S. operations to a new and expanded facility in the fourth quarter of 2015. We expect our rental costs to increase to $1.0 million for the year ended December 31, 2016. We also expect to incur increased expenses associated with being a public company, including increased costs of accounting, audit, legal, regulatory and tax-related services associated with maintaining compliance with exchange listing and SEC requirements, director and officer insurance costs and investor and public relations costs.

We expect our general and administrative costs to increase as we attract and retain additional personnel.

Other Income (Expense)

Other income (expense) consists of reimbursement of research and development costs extent under a research and development grant awarded by the Ministry of Economy, Trade and Industry, or METI, interest expense associated with notes payable that were converted in 2014, and interest income on cash.

Income Taxes

We are a multi-national company subject to taxation in the United States, Japan and Singapore. In 2013 and 2014, our benefit from (or provision for) income taxes was $0.3 million and $(0.1) million, respectively, on pre-tax loss of $3.6 million and $5.1 million, respectively. As of December 31, 2014, we had federal and state net operating loss

carryforwards of $2.1 million and $2.4 million, respectively, both of which begin to expire in 2030. As of December 31, 2014, we also had federal and state research and development tax credit carryforwards of $0.4 million and $0.2 million, respectively, which begin to expire in 2025. As of December 31, 2014, we had net operating loss carryforwards in Japan of $3.5 million, which may be available to offset future income tax liabilities and begin to expire in 2015.

Results of Operations

Comparison of Six Months Ended June 30, 2014 and 2015 (unaudited)

The following table summarizes our results of operations for the six months ended June 30, 2014 and 2015:

	Six Months Ended June 30,		Increase (Decrease)
	2014	2015	
	(in thousands)		
Revenue	$ —	$ 152	$ 152
Operating expenses:			
Research and development	1,087	3,457	2,370
General and administrative	1,173	3,789	2,616
Total operating expenses	2,260	7,246	4,986
Loss from operations	(2,260)	(7,094)	(4,834)
Other income (expense), net	203	28	(175)
Loss before income taxes	(2,057)	(7,066)	(5,009)
Income tax provision	(60)	(99)	(39)
Net loss	$(2,117)	$(7,165)	$ (5,048)

Revenue

Revenue was $0 for the six months ended June 30, 2014 compared to $0.2 million for the six months ended June 30, 2015 due to revenue earned for research and development performed under our collaboration agreement which we entered into in 2014 and terminated in May 2015.

Research and Development Expenses

The table below summarizes our research and development expenses incurred on our platform and by program for the six months ended June 30, 2014 and 2015:

	Six Months Ended June 30,		Increase (Decrease)
	2014	2015	
	(in thousands)		
HD HTT SNP-1 and HD HTT SNP-2 programs (1)	$ —	$ 215	$ 215
DMD Exon 51 program	—	188	188
IBD SMAD7 program	—	149	149
Discovery programs	—	203	203
Platform development and identification of potential drug discovery candidates	1,087	2,702	1,615
Total research and development expenses	$1,087	$3,457	$ 2,370

(1) Given the nature of program development for these programs, the costs incurred in such programs have been common to both programs and therefore are not subject to separability. We expect that upon the filing of an IND with respect to the lead product candidate in each such program and the initiation of clinical studies for each such candidate, the costs incurred for each such candidate will be separate and distinct.

Research and development expenses were $1.1 million for the six months ended June 30, 2014, compared to $3.5 million for the six months ended June 30, 2015. The increase of $2.4 million was due, in part, to the following:

- an increase of $0.2 million in research expenses related to our HD HTT SNP-1 and HD HTT SNP-2 programs for collaborations with Children's Hospital of Philadelphia for preclinical research studies;
- an increase of $0.2 million in research expenses related to our DMD Exon 51 program for collaborations with the University of Oxford for preclinical research studies;
- an increase of $0.1 million in research expenses related to our IBD SMAD7 program for preclinical research studies; and
- an increase of $0.2 million in drug discovery candidate expenses due to research related to our DMD AcRIIb, EBS KRT14 SNP-1 and EBS KRT14 SNP-2 programs and three potential other targets.

Platform development and identification of potential drug discovery candidates includes salary and related benefits costs, as well as costs associated with overall research directed at the identification of additional potential drug candidates. These expenses increased $1.6 million as a result of higher salary and related benefits costs of $1.8 million, including $1.2 million of share-based compensation, due to an increase in employee headcount, offset by costs redirected to product and drug discovery candidates.

General and Administrative Expenses

General and administrative expenses were $1.2 million for the six months ended June 30, 2014 compared to $3.8 million for the six months ended June 20, 2015. The increase of $2.6 million was due to an increase in share-based compensation expense of $1.3 million as well as an increase in employee headcount, which resulted in an increase in salary and related benefits costs of $0.2 million. Our professional fees increased $0.9 million in the six months ended June 30, 2015 due to higher legal fees and accounting fees as we prepared for our potential initial public offering.

Research and development and general and administrative expenses incurred at our Japan facility in the six months ended June 30, 2014 and 2015 represented 21.6% and 8.2% of the related consolidated expenses for the six months ended June 30, 2014 and 2015, respectively. The impact of changes in foreign currency did not have a significant impact on changes in our consolidated research and development and general and administrative expenses from the six months ended June 30, 2014 to the six months ended June 30, 2015.

Other (Expense) Income

Other (expense) income for the six months ended June 30, 2014 decreased from $0.2 million to less than $0.1 million for the six months ended June 30, 2015 due to fewer government grant reimbursements for research and development in Japan during the six months ended June 30, 2015.

Income Tax Benefit (Provision)

During both the six months ended June 30, 2014 and 2015, we recorded a tax provision of $0.1 million, which is a result of income taxed in the United States due to income under a contract research arrangement between our U.S. and Singapore entities. During the six months ended June 30, 2014 and 2015, we recorded no income tax benefits for the net operating losses incurred in Japan and Singapore, due to uncertainty regarding future taxable income in these jurisdictions.

Comparison of the Year Ended December 31, 2013 to the Year Ended December 31, 2014

The following table summarizes our results of operations for 2013 and 2014:

	Year Ended December 31,		Increase (Decrease)
	2013	2014	
	(in thousands)		
Revenue	$ —	$ —	$ —
Operating expenses:			
Research and development	1,920	2,395	475
General and administrative	1,654	2,999	1,345
Total operating expenses	3,574	5,394	1,820
Loss from operations	(3,574)	(5,394)	(1,820)
Other (expense) income	(74)	249	323
Loss before income taxes	(3,648)	(5,145)	(1,497)
Income tax benefit (provision)	330	(84)	(414)
Net loss	$(3,318)	$(5,229)	$ (1,911)

Revenue

There was no revenue for the years ended December 31, 2013 and 2014.

Research and Development Expenses

The table below summarizes our research and development expenses incurred on our platform and by program for 2013 and 2014:

	Year Ended December 31,		Increase (Decrease)
	2013	2014	
	(in thousands)		
HD HTT SNP-1 and HD HTT SNP-2 programs (1)	$ —	$ —	$ —
DMD Exon 51 program	—	—	—
IBD SMAD7 program	—	—	—
Discovery programs	—	—	—
Platform development and identification of potential drug discovery candidates	1,920	2,395	475
Total research and development expenses	$1,920	$2,395	$ 475

(1) Given the nature of program development for these programs, the costs incurred in such programs have been common to both programs and therefore are not subject to separability. We expect that upon the filing of an IND with respect to the lead product candidate in each such program and the initiation of clinical studies for each such candidate, the costs incurred for each such candidate will be separate and distinct.

Research and development expenses were $1.9 million in 2013, compared to $2.4 million in 2014. The increase of $0.5 million was a result of higher salary and related benefits costs due to an increase in employee headcount, as we increased our research for potential drug candidates.

General and Administrative Expenses

General and administrative expenses were $1.7 million in 2013 compared to $3.0 million in 2014. The increase of $1.3 million was a result of salary and related benefits costs due to an increase in employee headcount, which resulted in higher salary and related benefits costs of $1.0 million, as well as an increase in our professional fees of $0.3 million from 2013 to 2014 due to higher legal fees.

Research and development and general and administrative expenses incurred at our Japan facility in 2013 and 2014 represented 23.0% and 17.7% of the related consolidated expenses for 2013 and 2014, respectively. The impact of changes in foreign currency did not have a significant impact on changes in our consolidated research and development and general and administrative expenses from 2013 to 2014.

Other (Expense) Income

Other (expense) income in 2013 increased from an expense of less than $0.1 million to income of $0.3 million in 2014 due additional government grants received in Japan for reimbursement of certain research and development costs.

Liquidity and Capital Resources

Since our inception, we have not generated any product revenue and have incurred recurring net losses. From our inception through June 30, 2015, we have financed our operations through private placements of promissory notes and the proceeds from the issuance of ordinary shares. Through December 31, 2014 and June 30, 2015, we had received net proceeds of approximately $15.2 million and $26.8 million, respectively, from such transactions. In August 2015, we completed a private placement of Series B preferred shares and received net proceeds of approximately $62.5 million.

As of December 31, 2014, we had cash totaling $1.0 million and an accumulated deficit of $15.9 million. As of June 30, 2015, we had cash totaling $7.8 million and an accumulated deficit of $23.0 million and restricted cash of $1.0 million related to a letter of credit for our new office and laboratory space in Cambridge, Massachusetts.

The cash resources we have on hand at June 30, 2015 along with the net proceeds of $62.5 million raised from the private placement of Series B preferred shares on August 14, 2015 are expected to allow us to fund our operations and meet our working capital obligations through at least 2016. We expect that our existing cash together with anticipated net proceeds from this offering will enable us to fund our operating expenses and capital expenditure requirements through at least 2017. We have based this estimate on assumptions that may prove to be wrong, and we may use our available capital resources sooner than we currently expect.

Until we can generate significant revenue from product sales, if ever, we expect to finance our operations through a combination of public or private equity or debt financings or other sources, which may include collaborations with third parties. Adequate additional financing may not be available to us on acceptable terms, or at all. Our inability to raise capital as and when needed would have a negative impact on our financial condition and our ability to pursue our business strategy. We will need to generate significant revenue to achieve profitability, and we may never do so.

Cash Flows

The following table summarizes our sources and uses of cash for each of the periods presented:

	Year Ended December 31,		Six Months Ended June 30,	
	2013	2014	2014	2015
			(unaudited)	
	(in thousands)			
Cash used in operating activities	$(3,551)	$(4,426)	$(2,000)	$ (3,011)
Cash used in investing activities	(47)	(257)	(205)	(1,430)
Cash provided by financing activities	3,672	5,619	5,619	11,646
Effect of foreign exchange rates of cash	(14)	(327)	(104)	(474)
Net increase in cash	$ 60	$ 609	$ 3,310	$ 6,731

Operating Activities

During the six months ended June 30, 2015, operating activities used $3.0 million of cash, primarily resulting from our net loss of $7.2 million offset by non-cash charges of $2.8 million and by cash provided by changes in our operating assets and liabilities of $1.4 million. The non-cash charges for the six months ended June 30, 2015 related primarily to an increase in share-based compensation of $2.5 million. Net cash provided by changes in our operating assets and liabilities during the six months ended June 30, 2015 was due primarily to an increase in accounts payable due to higher research and development costs, as well as the timing of payments.

During the six months ended June 30, 2014, operating activities used $2.0 million of cash, resulting from our net loss of $2.1 million offset by non-cash charges of $0.1 million due primarily to depreciation and amortization associated with our property and equipment. There was little change in our operating assets and liabilities during the six months ended June 30, 2014.

During 2014, operating activities used $4.4 million of cash, primarily resulting from our net loss of $5.2 million offset by non-cash charges of $0.4 million and by cash provided by changes in our operating assets and liabilities of $0.4 million. The non-cash charges for 2014 related primarily to $0.3 million of depreciation and amortization associated with our property and equipment. Net cash provided by changes in our operating assets and liabilities during 2014 consisted primarily of a $0.4 million increase in accrued expenses due to higher accruals for research and development costs.

During 2013, operating activities used $3.6 million of cash, resulting from our net loss of $3.3 million and cash used in changes in our operating assets and liabilities of $0.3 million, which consisted of a $0.2 million decrease in accounts payable and accrued expenses due to the timing of vendor invoicing and payments and a $0.1 million increase in accounts receivable.

Investing Activities

During the six months ended June 30, 2015, investing activities used $1.4 million of cash, consisting of restricted cash of $1.0 million primarily placed in favor of a letter of credit for our new office and laboratory space in Cambridge, Massachusetts along with purchases of property and equipment of $0.4 million.

During the six months ended June 30, 2014, investing activities used $0.2 million of cash, primarily consisting of purchases of property and equipment of $0.5 million offset by reimbursements of $0.3 million from METI.

During 2014, investing activities used $0.3 million of cash, primarily consisting of purchases of property and equipment of $0.6 million offset by reimbursements of $0.3 million from METI.

During 2013, investing activities used less than $0.1 million of cash for purchases of property and equipment.

Financing Activities

During the six months ended June 30, 2015, net cash provided by financing activities was $11.6 million, primarily from the issuance of ordinary shares to a third-party investor for $11.6 million.

During the six months ended June 30, 2014, net cash provided by financing activities was $5.6 million, primarily from the issuance of ordinary shares to investors.

During 2014, net cash provided by financing activities was $5.6 million, primarily from the issuance of ordinary shares to investors.

During 2013, net cash provided by financing activities was $3.7 million due to proceeds under notes payable to a related party of $6.2 million, offset by repayments in the amount of $2.5 million.

Effect of Foreign Exchange Rates on Cash

During the six months ended June 30, 2015, the effect of changes in foreign exchange rates on cash was $0.5 million due to changes in the Japanese yen related primarily to the translation of intercompany accounts denominated in Japanese yen from December 31, 2014 to June 30, 2015.

During the six months ended June 30, 2014, net cash provided by financing activities was $0.1 million due to minimal changes in the Japanese yen from December 31, 2013 to June 30, 2014.

During 2014, the effect of changes in foreign exchange rates on cash was $0.3 million due to changes in the Japanese yen related primarily to the translation of intercompany accounts denominated in Japanese yen from December 31, 2013 to December 31, 2014.

During 2013, the effect of changes in foreign exchange rates on cash were minimal due to the low level of cash balances on hand during the year.

Funding Requirements

We expect our expenses to increase substantially in connection with our ongoing research and development activities. In addition, upon the closing of this offering, we expect to incur additional costs associated with operating as a public company. We anticipate that our expenses will increase substantially if and as we:

- file INDs and initiate clinical studies for our programs in Huntington's disease, DMD and IBD;
- conduct research and continue preclinical development of the discovery targets such as AcRIIb and K14, as well as other future potential pipeline candidates;
- make strategic investments in manufacturing processes and formulations;
- develop manufacturing capabilities through outsourcing and potentially build a scalable manufacturing facility;
- maintain our intellectual property portfolio and consider the acquisition of complementary intellectual property; and
- seek regulatory approvals for our product candidates.

We may experience delays or encounter issues with any of the above, including but not limited to failed studies, complex results, safety issues or other regulatory challenges.

We expect that our existing cash together with anticipated net proceeds from this offering will enable us to fund our operating expenses and capital expenditure requirements through at least 2017. We have based this estimate on assumptions that may prove to be wrong, and we may use our available capital resources sooner than we currently expect. Because of the numerous risks and uncertainties associated with the development of drug candidates or follow-on programs and because the extent to which we may enter into collaborations with third parties for development of product candidates is unknown, we are unable to estimate the amounts of increased capital outlays and operating expenses associated with completing the research and development for our therapeutic programs. Our future capital requirements for our therapeutic programs will depend on many factors, including:

- the progress and results of conducting research and continued preclinical development within our therapeutic programs and with respect to future potential pipeline candidates;
- the cost of manufacturing clinical supplies of our product candidates;
- the costs, timing and outcome of regulatory review of our product candidates;
- the costs and timing of future commercialization activities, including manufacturing, marketing, sales and distribution, for any of our product candidates for which we receive marketing approval;
- the revenue, if any, received from commercial sales of our product candidates for which we receive marketing approval;
- the costs and timing of preparing, filing and prosecuting patent applications, maintaining and enforcing our intellectual property rights and defending any intellectual property-related claims;
- the effect of competing technological and market developments; and
- the extent to which we acquire or invest in businesses, products and technologies, including entering into licensing or collaboration arrangements for product candidates, although we currently have no commitments or agreements to complete any such transactions.

Identifying potential product candidates and conducting preclinical testing and clinical trials is a time-consuming, expensive and uncertain process that takes years to complete, and we may never generate the necessary data or results required to obtain marketing approval and achieve product sales. In addition, our product candidates, if approved, may not achieve commercial success. Our product revenue, if any, will be derived from sales of products that we do not expect to be commercially available for many years, if ever. Accordingly, we will need to obtain substantial additional funds to achieve our business objectives.

Adequate additional funds may not be available to us on acceptable terms, or at all. We do not currently have any committed external source of funds. To the extent that we raise additional capital through the sale of equity or convertible debt securities, your ownership interest will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect your rights as a holder of ordinary shares. Additional debt

financing and preferred equity financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends and may require the issuance of warrants, which could potentially dilute your ownership interest.

If we raise additional funds through collaborations, strategic alliances or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates or grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings when needed, we may be required to delay, limit, reduce or terminate our product development programs or any future commercialization efforts or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

Contractual Obligations and Commitments

The following table summarizes our contractual obligations at December 31, 2014 and the effect such obligations are expected to have on our liquidity and cash flows in future periods:

	Total	Less Than 1 Year	1-3 Years	3-5 Years	More Than 5 Years
			(in thousands)		
Operating lease commitments (1)	$11,505	$ 457	$2,302	$3,038	$ 5,708
Capital lease obligations (1)	203	51	135	17	—
License and collaboration agreements (2)	714	319	365	30	—
Total	$12,422	$ 827	$2,802	$3,085	$ 5,708

(1) Includes the following leases entered into subsequent to December 31, 2014: (i) office and laboratory space in Okinawa, Japan under an annually renewable lease, which was renewed in April 2015 and expires in March 2016; (ii) in April 2015, we entered into a lease agreement for an office and laboratory facility in Cambridge, Massachusetts; the lease term commenced in October 2015 and has a term of 7.5 years; and (iii) in April 2015, we entered into a three-year lease to acquire laboratory equipment in the amount of $0.3 million, which has been accounted for as a capital lease.

(2) We have also entered into certain license and research and collaboration agreements subsequent to December 31, 2014. See “Business—Licensing Arrangements and Research Collaborations.” Our known commitments under those agreements are included in the table above under “License and collaboration agreements.” In addition, we may be obligated to make future payments to third parties under certain of these license and research and collaboration agreements, including sublicense fees, royalties and payments that become due and payable on the achievement of certain development and regulatory milestones. As the amount and timing of sublicense fees and the achievement and timing of these milestones are not probable and estimable, such commitments have not been included on our balance sheet or in the table above.

We enter into contracts in the normal course of business with CROs for clinical trials, preclinical research studies and testing, manufacturing and other services and products for operating purposes. These contracts generally provide for termination upon notice, and therefore we believe that our non-cancelable obligations under these agreements are not material.

Off-Balance Sheet Arrangements

We did not have during the periods presented, and we do not currently have, any off-balance sheet arrangements, as defined in the rules and regulations of the Securities and Exchange Commission.

Recently Adopted Accounting Pronouncements

In July 2013, the Financial Accounting Standards Board, or FASB, issued Accounting Standards Update 2013-11, or ASU 2013-11, *Presentation of an Unrecognized Tax Benefit When a Net Operating Loss Carryforward, a Similar Tax Loss, or a Tax Credit Carryforward Exists*, which requires unrecognized tax benefits to be presented as a decrease in a net operating loss, similar tax loss or tax credit carryforward if certain criteria are met. The guidance was effective for fiscal years and interim periods within those years beginning after December 15, 2013 for public entities with early adoption permitted in 2013. Previously provide explicit guidance on the financial statement presentation of an unrecognized tax benefit when a net operating loss carryforward, a similar tax loss or a tax credit carryforward exists. We elected to early adopt ASU 2013-11 in 2013.

In June 2014, the FASB issued ASU 2014-10, *Development Stage Entities*. The amendments in this update removed all incremental financial reporting requirements, including inception-to-date information and certain other disclosures currently required under U.S. GAAP, in the financial statements of development stage companies. The amendments are effective for annual reporting periods beginning after December 15, 2014 and interim reporting periods beginning after December 15, 2015. Early adoption is permitted for any annual reporting period or interim period for which the entity's financial statements have not yet been issued (public business entities) or made available for issuance (other entities). We elected to early adopt this guidance and, therefore, have not presented inception-to-date disclosures in our consolidated financial statements.

Recently Issued Accounting Pronouncements

In May 2014, the FASB issued ASU No. 2014-09—*Revenue from Contracts with Customers (Topic 606)*. ASU 2014-09 supersedes most of the existing guidance on revenue recognition in ASC Topic 605, Revenue Recognition. The core principle of the revenue model is that an entity recognizes revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods and services. In applying the revenue model to contracts within its scope, an entity will need to (i) identify the contract(s) with a customer, (ii) identify the performance obligations in the contract, (iii) determine the transaction price, (iv) allocate the transaction price to the performance obligations in the contract and (v) recognize revenue when (or as) the entity satisfies a performance obligation. On July 9, 2015, the FASB extended the effective date of adoption of the standard to interim reporting periods within annual reporting periods beginning after December 15, 2017 (that is, beginning in the first interim period within the year of adoption). Early adoption of the standard is permitted for all entities for interim and annual periods beginning after December 15, 2016. We do not expect the impact of adopting ASU 2014-09 will be material to our consolidated financial statements.

In August 2014, the FASB issued ASU 2014-15, *Presentation of Financial Statements—Going Concern*, on disclosure of uncertainties about an entity's ability to continue as a going concern. This guidance addresses management's responsibility in evaluating whether there is substantial doubt about a company's ability to continue as a going concern and to provide related footnote disclosures. The guidance is effective for fiscal years beginning after December 15, 2016 and for interim periods within those fiscal years, with early adoption permitted. We do not expect the adoption of this guidance to have material impact on our consolidated financial statements.

In February 2015, the FASB issued ASU 2015-02, *Consolidation (Topic 810)*, to address financial reporting considerations for the evaluation as to the requirement to consolidate certain legal entities. ASU 2015-02 is effective for fiscal years and for interim periods within those fiscal years beginning after December 15, 2015. We are evaluating the impact of ASU 2015-02 and if early adoption is appropriate in future reporting periods.

In April 2015, the FASB issued ASU 2015-03, *Interest—Imputation of Interest (Subtopic 835-30)*, as part of the initiative to reduce complexity in accounting standards. The update requires that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct deduction from the carrying amount of that debt liability, consistent with debt discounts. ASU 2015-03 is effective for annual periods beginning after December 15, 2015 and for interim periods within those fiscal years. We do not expect the impact of ASU 2015-03 to be material to our consolidated financial statements.

Other accounting standards that have been issued or proposed by the FASB or other standards-setting bodies that do not require adoption until a future date are not expected to have a material impact on our consolidated financial statements upon adoption.

Quantitative and Qualitative Disclosure about Market Risk

Market risk represents the risk of loss that may impact our financial position due to adverse changes in financial market prices and rates. Our market risk exposure is primarily the result of fluctuations in interest rates and foreign exchange rates as well as, to a lesser extent, inflation.

Interest Rate Risk

We are exposed to interest rate risk in the ordinary course of our business. Our cash is held in readily available checking accounts.

Foreign Currency Risk

We are exposed to market risk related to changes in the value of the Japanese yen, which is the currency our Japanese subsidiary conducts its business in. As of June 30, 2015, 7.2% of our assets were located in Japan, and 8.2% of our general and administrative and research and development expenditures were transacted in Japanese yen through the six months ended June 30, 2015. Our foreign currency sensitivity is affected by changes in the Japanese yen, which is impacted by economic factors both locally in Japan and worldwide. A hypothetical 10% change in foreign currency rates would not have a material impact on our historical financial position or results of operations.

Inflation Risk

We do not believe that inflation had a material effect on our business, financial condition or results of operations in the last two years.

Critical Accounting Policies and Significant Judgments and Estimates

Our financial statements are prepared in accordance with generally accepted accounting principles, or GAAP, in the United States of America. The preparation of our financial statements and related disclosures requires us to make estimates and assumptions that affect the reported amount of assets, liabilities, revenue, costs and expenses and related disclosures. We believe that the estimates and assumptions involved in the accounting policies described below may have the greatest potential impact on our consolidated financial statements and, therefore, consider these to be our critical accounting policies. We evaluate our estimates and assumptions on an ongoing basis. Our actual results may differ from these estimates under different assumptions and conditions.

Income Taxes

We are a multi-national company subject to taxation in the United States, Japan and Singapore.

We account for income taxes using an asset and liability approach, which requires recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been recognized in the consolidated financial statements, but have not been reflected in taxable income. A valuation allowance is established to reduce deferred tax assets to their estimated realizable value. Therefore, we provide a valuation allowance to the extent that it is more likely than not that it will generate sufficient taxable income in future periods to realize the benefit of its deferred tax assets.

We account for uncertainty in income taxes recognized in the financial statements by applying a two-step process to determine the amount of tax benefit to be recognized. First, the tax position must be evaluated to determine the likelihood that it will be sustained upon external examination by the taxing authorities. If the tax position is deemed more-likely-than-not to be sustained, the tax position is then assessed to determine the amount of benefit to recognize in the financial statements. The amount of the benefit that may be recognized is the largest amount that has a greater than 50% likelihood of being realized upon ultimate settlement. The provision for income taxes includes the effects of any resulting tax reserves, or unrecognized tax benefits, that are considered appropriate as well as the related net interest and penalties.

Share-Based Compensation

We measure options to purchase our ordinary shares and other share-based awards granted to employees and directors based on the fair value on the date of grant and recognize the corresponding compensation expense of those awards, net of estimated forfeitures, over the requisite service period, which is generally the vesting period of the respective award. Generally, we have issued options to purchase shares and share awards and record the expense for these awards using the straight-line method.

We measure share-based awards granted to consultants and non-employees based on the fair value of the award on the date at which the related service is complete. Compensation expense is recognized over the period during which services are rendered by such consultants and non-employees until completed. At the end of each financial reporting period prior to completion of the service, the fair value of these awards is re-measured using the then-current fair value of our ordinary shares and updated assumption inputs in the Black-Scholes option-pricing model.

The fair value of each share option grant was determined using the methods and assumptions discussed below. Each of these inputs is subjective and generally requires significant judgment and estimation by management.

- *Fair Value of Ordinary Shares.* As discussed below, the fair value of our ordinary shares underlying our share options has historically been determined by our board of directors. Because there has been no public market for our ordinary shares, our board of directors has determined the fair value of our ordinary shares at the time of grant of the option by considering a number of objective and subjective factors, including valuations of comparable companies, sales of our shares to unrelated third parties, our operating and financial performance and general and industry specific economic outlook.
- *Expected Term.* The expected term of share options represents the weighted-average period that the share options are expected to remain outstanding. We estimated the expected term using the simplified method, which is an average of the contractual term of the option and the vesting period.
- *Expected Volatility.* Since there has been no public market for our ordinary shares and lack of company-specific historical volatility, we have determined the share price volatility for options granted based on an analysis of the volatility used by a peer group of publicly traded companies. In evaluating similarity, we consider factors such as industry, stage of life cycle and size.
- *Risk-free Interest Rate.* The risk-free interest rate is based on the U.S. Treasury yield in effect at the time of the grant for zero-coupon U.S. Treasury notes with remaining terms similar to the expected term of the options.
- *Dividend Rate.* The expected dividend was assumed to be zero as we have never paid dividends and have no current plans to do so.
- *Expected Forfeiture Rate.* We are required to estimate forfeitures at the time of grant, and revise those estimates in subsequent periods if actual forfeitures differ from those estimates. We use historical data to estimate pre-vesting option forfeitures and record share-based compensation expense only for those awards that are expected to vest. To the extent actual forfeitures differ from the estimates, the difference will be recorded as a cumulative adjustment in the period that the estimates are revised.

We did not issue any share options or share awards in 2013 and 2014.

The estimated grant-date fair value of our share-based awards granted to our employees and directors was calculated using the Black-Scholes option-pricing model, based on the following assumptions for the six months ended June 30, 2015:

	Six Months Ended June 30, 2015
Risk-free interest rate	1.78%
Expected term (in years)	5.52 – 6.08
Expected volatility	71.02%
Expected dividend yield	0%
Exercise price	$10.00
Fair value of ordinary share	$17.83

The fair value of our share-based awards granted to our non-employees was calculated using the Black-Scholes option-pricing model, based on the following assumptions for the six months ended June 30, 2015:

	Six Months Ended June 30, 2015
Risk-free interest rate	2.14% – 2.35%
Expected term (in years)	9.69 – 10.00
Expected volatility	69.16% – 69.80%
Expected dividend yield	0%
Exercise price	$10.00
Fair value of ordinary share	$17.83 – 35.56

These assumptions represented our best estimates, but the estimates involve inherent uncertainties and the application of our judgment.

The following table summarizes the classification of our share-based compensation expense recognized in our consolidated statements of operations:

	Six Months Ended June 30, 2015 (unaudited)
Research and development expenses	$ 1,182
General and administrative expenses	1,310
Total share-based compensation expense	$ 2,492

Determination of the Fair Value of Ordinary Shares

We are a privately held company with no active public market for our ordinary shares. Therefore, our board of directors has estimated the fair value of our ordinary shares at various dates, with input from management, considering our most recently available third-party valuations of ordinary shares and our board of directors' assessment of additional objective and subjective factors that it believed were relevant and which may have changed from the date of the most recent valuation through the date of the grant.

The board determined the estimated per share fair value of our ordinary shares at various dates considering contemporaneous and retrospective valuations performed in accordance with the guidance outlined in the American Institute of Certified Public Accountants Practice Aid, *Valuation of Privately-Held Company Equity Securities Issued as Compensation*, or the Practice Aid. Following the consummation of this offering, the fair value of our ordinary shares will be determined based on the quoted market price of our ordinary shares. In conducting the valuations, the third-party considered all objective and subjective factors that it believed to be relevant for each valuation conducted in accordance with the Practice Aid, including our best estimate of our business condition, prospects and operating performance at each valuation date. Other significant factors included:

- the prices at which we sold shares to unrelated third parties;
- the progress of our research and development programs, including the status of preclinical studies within our therapeutic programs;
- our stage of development and commercialization and our business strategy;
- external market conditions affecting the biopharmaceutical industry;
- trends within the biopharmaceutical industry;
- our financial position, including cash on hand, and our historical and forecasted performance and operating results;
- the lack of an active public market for our ordinary shares and our preferred shares;
- the likelihood of achieving a liquidity event, such as an initial public offering or sale of our company in light of prevailing market conditions; and
- the analysis of initial public offerings and the market performance of similar companies in the biopharmaceutical industry.

There are significant judgments and estimates inherent in these valuations. These judgments and estimates include assumptions regarding our future operating performance, the stage of development of our product candidates, the timing of a potential initial public offering or other liquidity event and the determination of the appropriate valuation methodology at each valuation date. If we had made different assumptions, our share-based compensation expense, net loss attributable to ordinary share and net loss per share attributable to ordinary shareholders could have been significantly different.

Once a public trading market for our ordinary shares has been established in connection with the closing of this offering, it will no longer be necessary for our board of directors to estimate the fair value of our ordinary shares in connection with our accounting for granted share options and share awards, as the fair value of our ordinary shares will be its trading price on The NASDAQ Global Select Market.

Valuation Methodologies

The valuations were prepared in accordance with the guidelines in the Practice Aid, which prescribes several valuation approaches for setting the value of an enterprise, such as the cost, market and income approaches, and various methodologies for allocating the value of an enterprise to its ordinary shares.

We considered several types of approaches in the preparation of our valuations as follows:

- *Market Approach.* The market approach values a business by reference to guideline companies, for which enterprise values are known. This approach has two principal methodologies. The guideline public company methodology derives valuation multiples from the operating data and share prices of similar publicly-traded companies. The guideline acquisition methodology focuses on comparisons between the subject company and guideline acquired public or private companies. A derivative of the guideline public company method is the guideline initial public offering method, which compares the enterprise values of newly public enterprises in our industry.
- *Discounted Cash Flow Method, or DCF.* The discounted cash flow method estimates the value of the business by discounting the estimated future cash flows available for distribution after funding internal needs to present value.
- *Option-Pricing Method Backsolve, or OPM Backsolve.* The OPM Backsolve method derives the implied equity value for a company from a recent transaction involving the company's own securities issued on an arms-length basis.

Methods Used to Allocate Our Enterprise Value to Classes of Securities

In accordance with the Practice Aid, we used the probability-weighted expected return method, or PWERM, to allocate the enterprise value across our classes and series of share capital to determine the fair value of our ordinary shares at each valuation date. The PWERM is a scenario-based analysis that estimates the value per share based on the probability-weighted present value of expected future investment returns, considering each of the possible outcomes available to us, as well as the economic and control rights of each share class.

The foregoing valuation methodologies are not the only methodologies available and they will not be used to value our ordinary shares once this offering is complete. We cannot make assurances as to any particular valuation for our ordinary shares. Accordingly, investors are cautioned not to place undue reliance on the foregoing valuation methodologies as an indicator of future stock prices.

Option Grants

The following table summarizes by grant date the number of shares subject to options granted since our inception on July 12, 2012, the per share exercise price of the options, the fair value of ordinary shares underlying the options on date of grant and the per share estimated fair value of options:

Grant Date	Number of Shares Subject to Options Granted	Per Share Exercise Price of Options	Estimated Fair Value of Ordinary Shares per Share
March 10, 2015	426,449	$ 10.00	$ 17.83(1)
March 22, 2015	30,000	10.00	17.83(1)
July 9, 2015	24,400	24.21	35.56(1)
October 7, 2015	17,650	41.30	41.30

(1) In the third quarter of 2015, we undertook retrospective valuations of the fair value of our ordinary shares as of the grant dates and the values reflected in this column represent our estimated fair value per ordinary share in accordance with such retrospective valuations.

Based upon assumed initial public offering price of $ per share (the midpoint of the price range set forth on the cover of this prospectus), the aggregate intrinsic value of options outstanding as of June 30, 2015 was approximately $ million, of which approximately $ million related to vested options and approximately $ million related to unvested options.

JOBS Act Accounting Election

In April 2012, the Jumpstart Our Business Startups Act of 2012, or the JOBS Act, was enacted. Section 107 of the JOBS Act provides that an "emerging growth company" can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act for complying with new or revised accounting standards. Thus, an emerging growth company can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have irrevocably elected not to avail ourselves of this extended transition period and, as a result, we will adopt new or revised accounting standards on the relevant dates on which adoption of such standards is required for other public companies.

BUSINESS

Below is a description of our business. Please refer to the "Glossary of Scientific Terms" beginning on page 97 as you review this section.

Overview

We are a preclinical biopharmaceutical company with an innovative and proprietary synthetic chemistry drug development platform that we are using to design, develop and commercialize a broad pipeline of first-in-class or best-in-class nucleic acid therapeutic candidates. Nucleic acid therapeutics have the potential to address diseases that have been difficult to treat with small molecule drugs or biologics and have emerged as a large and promising class of drugs. We are initially developing nucleic acid therapeutics that target genetic defects to either reduce the expression of disease-promoting proteins or transform the production of dysfunctional mutant proteins into the production of functional proteins. Our platform is driven by our innovative and proprietary stereochemistry technology, enabling us to rationally design, optimize and manufacture stereopure nucleic acid therapeutics, which we believe possess drug properties that are superior to the stereoisomer mixtures of oligonucleotides currently on the market or in development by others. Building upon the innovative work of our scientific founders, Gregory L. Verdine, Ph.D. and Takeshi Wada, Ph.D., we have demonstrated the benefits of our stereopure nucleic acid therapeutics in preclinical studies. Our platform can be used to design therapies that utilize any of the major molecular mechanisms employed by nucleic acid therapeutics, including antisense, ribonucleic acid interference, or RNAi, exon skipping and others.

Our goal is to develop disease-modifying drugs for indications with a high degree of unmet medical need, in both orphan and broad diseases. We are initially focused on designing single-stranded nucleic acid therapeutics that can distribute broadly within the human body, allowing us to target diseases across multiple organ systems and tissues, through both systemic and local administration. Our most advanced therapeutic programs are in Huntington's disease, Duchenne muscular dystrophy, or DMD, and inflammatory bowel disease, or IBD. In Huntington's disease, we have programs targeting HTT SNP-1 and HTT SNP-2; in DMD, we are targeting Exon 51; and in IBD, we are targeting SMAD7. We have product candidates in our programs targeting HTT SNP-1 and Exon 51, and we expect to select lead candidates in our HTT SNP-2 and SMAD7 programs in late 2015 and early 2016, respectively. We expect to file investigational new drug applications, or INDs, with the U.S. Food and Drug Administration, or FDA, for each of these candidates in 2016 and early 2017. We have late-stage discovery programs in epidermolysis bullosa simplex, in which we are targeting KRT14 SNP-1 and KRT14 SNP-2, and in DMD, in which we are focused on an additional DMD target, AcRIIb. We expect to identify lead candidates for these programs in 2016. We believe that, based on our initial selection criteria of novel and fast-follower opportunities, our platform can potentially be used in the near-term to design treatments for approximately 25 other potential target indications, mostly consisting of orphan indications, with an initial focus on orphan neuromuscular and central nervous system disease targets.

We believe that we have a strong intellectual property position relating to the development and commercialization of our stereopure nucleic acid therapeutics. Our intellectual property portfolio includes filings designed to protect stereopure oligonucleotide compositions generally as well as filings designed to protect stereopure compositions of oligonucleotides with particular stereochemical patterns (for example, that affect or confer biological activity). Our portfolio also includes filings on both methods and reagents that are designed to protect various features of the chemical methodologies that enable production of such stereopure oligonucleotide compositions. Our portfolio also includes filings designed to protect methods of using stereopure oligonucleotide compositions and filings designed to protect particular stereopure oligonucleotide products, such as those having a particular sequence, pattern of nucleoside or backbone modification, or both, pattern of backbone linkages and pattern of backbone chiral centers.

We believe that our technology provides us with a unique position in the therapeutic oligonucleotide marketplace. Due to prior or expected patent expirations and patent invalidations, we believe that a variety of useful and effective oligonucleotide chemistries, such as certain backbone and sugar modifications, that have been developed in the industry will be available to the public prior to when we expect our drugs will be commercialized. Therefore, we believe that we can readily incorporate these chemistries or other chemistries into our stereopure drugs. Moreover, our strategy does not require or rely on a particular chemistry or any particular nucleotide sequence, thus permitting us to navigate the intellectual property landscape in the field while developing our novel and proprietary oligonucleotide drugs.

Our founders and members of our management team are leaders in the field of nucleic acid therapeutics, including world renowned scientists, leading researchers in the field and executives with a proven track record in drug discovery development and commercialization of innovative therapeutics.

Nucleic Acid Therapeutics

A majority of traditional therapeutics modalities, such as small molecule drugs and biologics, work by interacting with proteins that contribute to the disease. However, there are thought to be a limited number of “druggable” proteins; it is currently estimated that approximately 80% of human protein targets cannot be addressed by these conventional approaches. In contrast, directing medicines to the ribonucleic acid, or RNA, which is critical to the production of proteins, rather than to the proteins themselves, has the potential to significantly increase the number of druggable targets.

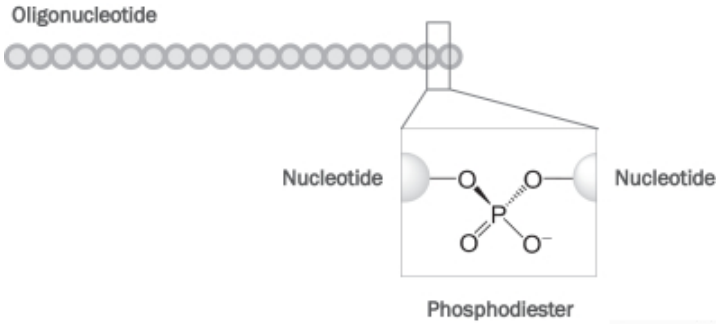
Nucleic acid therapeutics is a large and innovative class of drugs that can modulate the function of target RNAs to ultimately affect the production of disease-associated proteins. Nucleic acid therapeutics employ a number of different molecular mechanisms to regulate protein production. These mechanisms can be broadly categorized as those that promote degradation of the target RNA, including antisense and RNAi, and those that involve binding to the target RNA and modulating its function by promoting exon skipping, splice-correction and RNA-guided gene editing.

The unique capability of nucleic acid therapeutics to address a wide range of genomic targets across multiple therapeutic areas has the potential to create potentially significant market opportunities to develop drugs to treat a broad spectrum of human diseases, including diseases where no medicines currently exist or for which existing treatments are suboptimal.

Design of Nucleic Acid Therapeutics

A large subset of nucleic acid therapeutics are comprised of chemically modified, short-length RNA or deoxyribonucleic acid, or DNA, strands, commonly known as oligonucleotides. Oligonucleotides are comprised of a sequence of nucleotides—the building blocks of RNA and DNA—that are linked together by a backbone of chemical bonds.

In nucleic acid molecules that have not been modified for therapeutic use, the nucleotides are linked by phosphodiester bonds, as shown below.



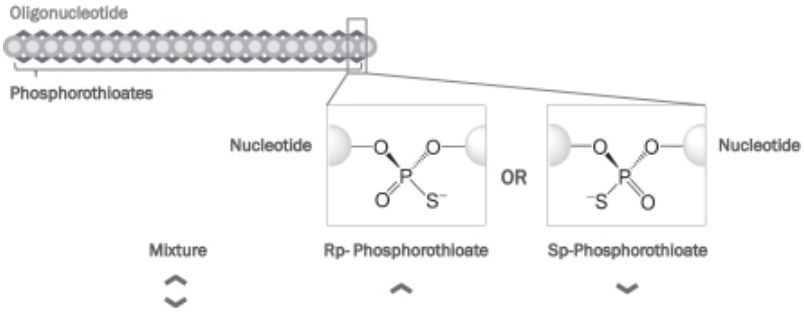
Such unmodified nucleic acid molecules are unsuitable for use as therapeutics because they are rapidly degraded by enzymes called nucleases that are widely present in the human body, are rapidly cleared by the kidneys and have poor uptake into targeted cells. The industry has employed chemical modifications of the nucleotides and phosphodiester bonds to improve the stability, biodistribution and cellular uptake of nucleic acid therapeutics.

Phosphorothioate, or PS, modification was one of the earliest and remains one of the most common backbone modifications used in nucleic acid therapeutics. In PS modification, one of the nonbridging oxygen (O) atoms bonded to a phosphorus (P) atom is replaced with a sulfur (S) atom. PS modification has been shown to improve the stability of oligonucleotides by making them less susceptible to enzymatic degradation. Further, PS bond-containing oligonucleotides increase binding to plasma proteins, which improves biodistribution by preventing rapid renal excretion of these molecules.

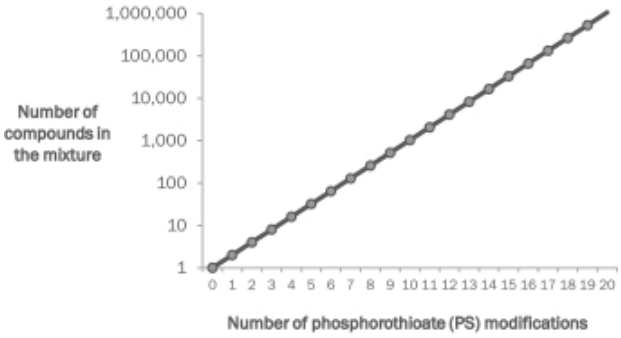
PS modification is accepted as state-of-the-art in the nucleic acid therapeutics field. The two nucleic acid therapeutics that have received regulatory approval, mipomersen and fomiversen, as well as a large majority of nucleic acid therapeutics currently in development (of which there are at least 20 in late-stage development or under regulatory review), employ PS modification. We believe that PS modification will remain a critical component of this class of therapeutics.

PS Modification Results in Complex Drug Mixtures

A consequence of using PS modification in oligonucleotide synthesis is that it creates a chiral center at each phosphorus, each of which is designated as either an “Sp” or “Rp” configuration. This chirality creates stereoisomers, which, as shown below, have identical chemical composition but different three-dimensional arrangement of their atoms and consequently different chemical and biological properties.



The configuration of each PS modification occurs randomly during conventional nucleic acid synthesis. Because oligonucleotides are comprised of numerous nucleotides and associated PS modifications—with each PS modification having a random chiral configuration—the synthesis process generates an exponentially large number of stereoisomers of the synthesized oligonucleotide. Specifically, each linkage of an additional nucleotide residue doubles the number of stereoisomers of the product, so that a conventional preparation of a PS-containing oligonucleotide is in fact a highly heterogeneous mixtures of 2^N stereoisomers, where N represents the number of PS modifications. For instance, as shown below, a conventional fully PS-modified oligonucleotide (20 nucleotides in length, 19 PS modifications) in fact is a mixture of over 500,000 stereoisomers, each having the same nucleotide sequence but differing in the stereochemistry along their backbones.



Stereoisomers often possess different chemical and pharmacologic properties. For example, certain stereoisomers can drive the therapeutic effects of a drug while others can be less beneficial or can even contribute to undesirable side effects. The greater the variation among a drug’s constituent stereoisomers, the greater the potential to diminish the drug’s efficacy and safety.

Up until now, it has not been possible to create stereopure PS-modified nucleic acid therapeutics—meaning drugs comprised entirely of the same stereoisomer—because of an inability to specifically control the configuration of each chiral PS linkage during chemical synthesis. Moreover, because of the sheer number of stereoisomers present in a mixture, it would be impractical, if not impossible, to physically isolate the most therapeutically optimal stereoisomer from within a mixture. For these reasons, all of the PS-modified nucleic acid therapeutics currently on

the market and in development by others are mixtures of many stereoisomers, which we believe are not optimized for stability, catalytic activity, efficacy or toxicity.

In small molecule therapeutics, U.S. regulators have long sought to eliminate the risks potentially posed by drug mixtures containing multiple stereoisomers. Since 1992, the FDA has recommended full molecular characterization of stereoisomers within small molecule drug mixtures. Historically, it has not been possible to achieve such characterization of nucleic acid therapeutic drug mixtures, which can contain tens of thousands to millions of distinct pharmacologic entities. We believe that our demonstrated ability to design and synthesize stereopure PS-modified nucleic acid therapeutics will set a new industry standard for the molecular characterization of complex nucleic acid therapeutic drug mixtures.

Our Solution: Controlling Stereochemistry in Nucleic Acid Therapeutics

We have developed proprietary technology that, for the first time, enables the development of PS-modified nucleic acid therapeutics in which stereochemistry is precisely controlled. This degree of control enables us to both rationally design and synthesize therapeutically optimized stereopure nucleic acid therapeutics.

We have discovered and continue to identify fundamental relationships between oligonucleotide stereochemistry and pharmacology, including stability, catalytic activity, specificity, safety and immunogenicity, which we believe have the potential to lead to improved efficacy and durability of effect. We have designed and synthesized stereopure PS-modified drugs that, when compared with their respective parent drug mixtures, possess superior stability or potency, or both, resulting in increased durability of effect, as well as specificity and decreased immune activity. Therefore, we expect them to have improved safety profiles and to be dosed at lower concentrations or less frequently, or both, compared with mixture-based nucleic acid therapeutics. We are using these discoveries to guide our drug development activities.

Advantages of Our Approach

We believe that our innovative and proprietary synthetic chemistry drug development platform is a significant advance in the development of nucleic acid therapeutics. The advantages of our approach include:

- ***Ability to design drugs rationally with optimized pharmacological properties***. Our platform reduces susceptibility to enzymatic degradation and renal clearance and optimizes interactions with proteins that mediate activity as well as those that affect safety and tolerability. Our ability to improve pharmacologic stability and reduce clearance can enhance the biodistribution of single-stranded oligonucleotides to multiple tissues following systemic administration without the need for additional delivery technology.
- ***Broad applicability***. Our platform is applicable to multiple RNA-targeting approaches, including antisense, RNAi, exon-skipping, RNA-guided gene editing, microRNA and others, and is compatible with a broad range of chemical modifications and targeting moieties.
- ***Proprietary manufacturing of stereopure nucleic acid therapeutics***. We have significant experience producing PS-modified stereopure nucleic acid therapeutics and we believe we have the intellectual property position and know-how necessary to protect, advance and scale our manufacturing processes.

Proof of Concept of Our Technology

We have demonstrated in preclinical models, predictive of human biology, that direct relationships exist between stereochemistry and pharmacology, and that these relationships can be used to rationally design and construct nucleic acid therapeutics. In proof-of-concept studies, we examined diverse sets of oligonucleotides designed and synthesized using our platform, which allowed us to characterize and compare the behavior of various stereoisomers. These studies have demonstrated that by controlling stereochemistry, we can optimize multiple aspects of pharmacology, including stability, catalytic activity, specificity, safety and immunogenicity, which we believe have the potential to lead to improved efficacy and durability of effect.

To assess the relationship between stereochemistry and pharmacology, we conducted studies of mipomersen using a diverse set of stereoisomers alongside the parent mixture. We chose to study mipomersen because it is the only systematically administered nucleic acid therapeutic approved for commercialization and because of the public availability of documents from the regulatory bodies that have evaluated mipomersen for marketing approval.

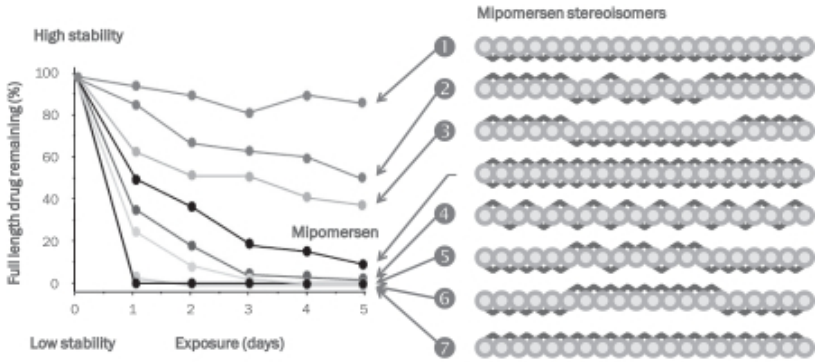
Mipomersen, which is marketed by Genzyme Corporation, a Sanofi Company under the brand name KYNAMRO, is approved for the treatment of homozygous familial hypercholesterolemia and is designed to silence production of apolipoprotein B, or ApoB. While mipomersen received marketing authorization in the United States, concerns about the drug's tolerability and liver and cardio-vascular safety led the European Medicines Agency, or the EMA, in 2012 to refuse to grant marketing authorization for mipomersen in the European Union. One of the EMA's central concerns about mipomersen was that a high proportion of patients stopped taking the drug within two years, mainly due to side effects such as flu-like symptoms, injection site reactions and liver toxicity. The EMA considered these side effects important because mipomersen is intended for long-term treatment in order to maintain its cholesterol-lowering effect.

Mipomersen is an oligonucleotide that contains 20 nucleotides and 19 PS modifications. The chirality of each PS modification has the effect of doubling the number of stereoisomers at each phosphorus and, therefore, mipomersen is actually a mixture of over 500,000 different stereoisomers (2^{19} = 524,288), or a stereomixture. We rationally designed and synthesized individual stereoisomers of mipomersen, each having specific and different stereochemistry, and conducted studies comparing the stereoisomers with the mipomersen stereomixture.

Stability

We investigated the relationship between stereochemistry and stability by exposing our panel of individual mipomersen stereoisomers and the mipomersen stereomixture to metabolic enzymes, including nucleases, in homogenate rat liver and rat serum. Each stereoisomer and the mipomersen stereomixture were incubated separately in rat whole-liver homogenate for five days at physiological temperature and the percentage of each full-length stereoisomer and the mipomersen stereomixture remaining was measured daily.

As shown in the graph below, by day five, less than 15% of the stereomixture remained. In contrast, at day five, over 50% of our stereopure isomers 1 and 2 remained, indicating that these individual stereoisomers have greater stability than the stereomixture. However, the mipomersen stereomixture was more stable than stereoisomers 5, 6 and 7.



Similar results were observed when the stability of the stereomixture and selected stereoisomers were compared in rat serum.

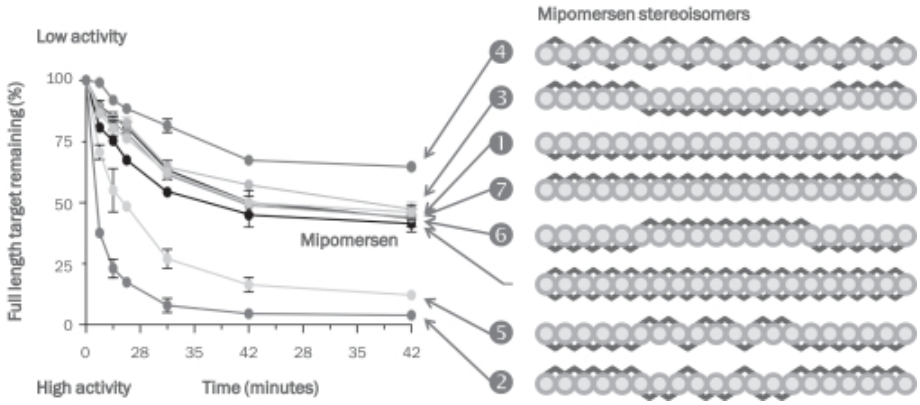
Catalytic Activity

We investigated the relationship between stereochemistry and catalytic activity, which, in the case of antisense, is a measure of the efficiency with which the drug can knockdown the target. Efficient catalytic activity is critical for optimized pharmacology of drugs like mipomersen.

In the body, mipomersen uses a cellular enzyme called RNase H to degrade or knockdown ApoB mRNA. Using *in vitro* assays of human RNase H, we evaluated the catalytic activity of the same panel of stereoisomers described above compared with the stereomixture.

Stereoisomers or stereomixtures were bound to target ApoB mRNA and incubated with human RNase H to initiate the catalytic reaction. The reaction was stopped at various time-points and the amount of full-length target ApoB mRNA remaining was measured.

As shown below, stereoisomers and the stereomixture exhibited large differences in their catalytic activity, as demonstrated by their efficiency in reducing the amount of the full-length target remaining over time. Certain stereoisomers, most notably stereoisomer 2, demonstrated catalytic activity at levels far superior to that of the stereomixture. Also, importantly, we identified stereoisomers that exhibited lower efficiency levels, most notably isomer 4.



Based on these and other data, we have established key design principles relating stereochemistry and catalytic efficiency using RNase H-mediated antisense. These principles can be applied across antisense therapeutics and are compatible with a broad range of chemical modifications to the drug molecule.

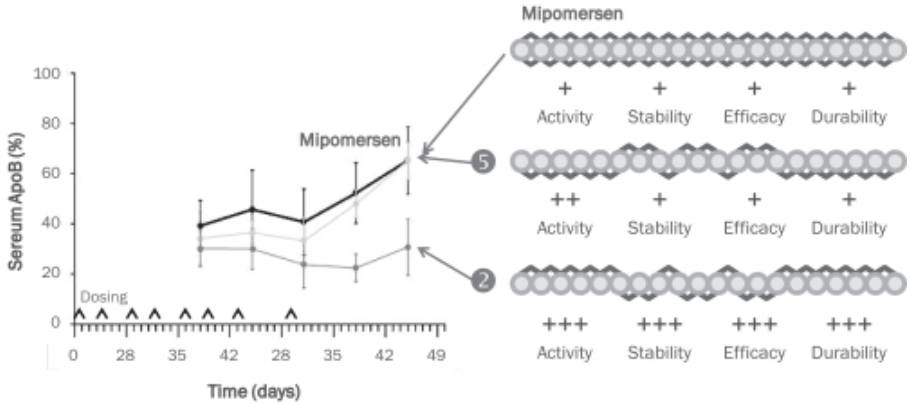
We believe that, based on these studies and others we have conducted, it is possible to synthesize stereopure nucleic acid therapies possessing increased stability and catalytic activity for any PS-modified nucleic acid therapeutic independent of nucleotide sequence composition.

Efficacy

We assessed whether improved stability and catalytic activity of our stereoiosomers will translate into greater efficacy in an *in vivo* pharmacological study. We administered our panel of stereoisomers and the stereomixture to transgenic mice that express human ApoB. This validated animal model was included in the preclinical package used for the regulatory approval of mipomersen in the United States.

Mice were injected twice weekly with 10 milligrams per kilogram of our stereoisomer 2, our stereoisomer 5 or the stereomixture over a four-week period. ApoB protein levels in the mice's serum were measured on a weekly basis. This treatment protocol and study design replicates the preclinical *in vivo* pharmacology study for mipomersen included in the regulatory submission for mipomersen.

As shown in the graph below, during the treatment period (up to day 28), stereoisomers 2 and 5, which as described above demonstrated increased catalytic activity *in vitro* compared with the stereomixture, also achieved greater reduction in serum ApoB compared with the stereomixture. In the graph below, levels of ApoB in serum are expressed as a percentage of ApoB at baseline, which was 100%. Knockdown of ApoB by the stereomixture decreased dramatically following final dose. This effect was also observed for stereoisomer 5, which had increased catalytic activity compared with the stereomixture but lowered stability. In comparison, stereoisomer 2, which had superior catalytic activity and stability, demonstrated durable knockdown of serum ApoB for over two weeks after the final dose.



These results demonstrate our ability to rationally design PS-modified nucleic acid therapeutics with greater stability and catalytic activity, which we believe have the potential to lead to improved efficacy and durability of effect.

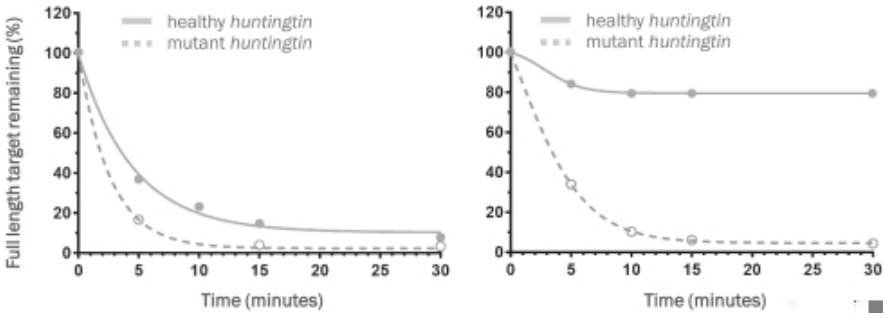
Specificity

By controlling stereochemistry, we have discovered that the pattern of cleavage caused by PS-modified antisense, within the target RNA, can be changed, including directing cleavage toward specific sites within the target. This unique capability enables the cleavage of target RNA to be sensitive to small differences between similar targets, where cleavage may be undesirable or potentially unsafe.

For example, Huntington's disease is caused by mutations in one allele of the *huntingtin* gene, resulting in the production of a disease-causing protein, while the other allele encodes a healthy protein. By optimizing stereochemistry, we are able to direct cleavage towards single-nucleotide differences between these alleles and silence the disease-causing *huntingtin* RNA while leaving the healthy *huntingtin* RNA intact.

Stereoisomers or stereomixtures were bound to mutant and healthy *huntingtin* RNA and incubated with human RNase H to initiate the catalytic reaction. The reaction was stopped at various time-points and the amount of full-length mutant and healthy *huntingtin* RNA remaining was measured.

Using these *in vitro* assays of human RNase H, we observed that the stereomixture (left figure) caused substantial reductions in both the mutant and healthy *huntingtin* RNA, while the optimized stereoisomers (right figure) preferentially cleaved mutant *huntingtin* RNA while sparing the healthy *huntingtin* RNA.



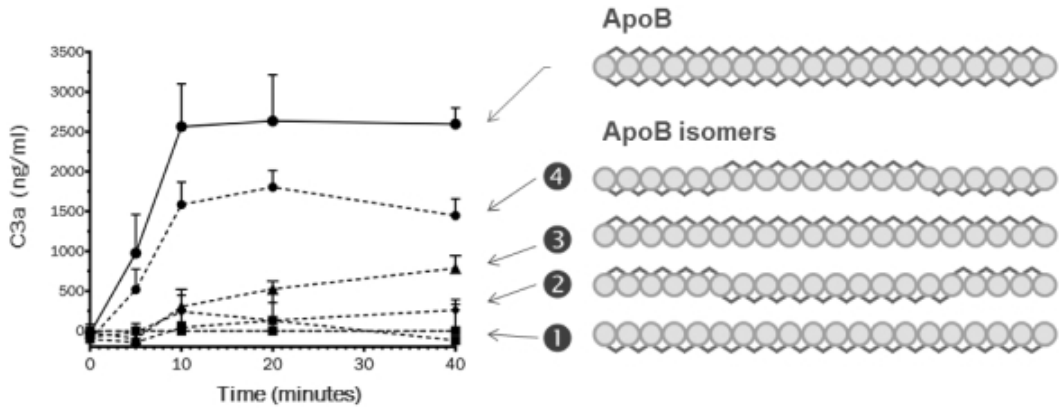
We believe our unique ability to change the cleavage pattern of PS-modified nucleic acid therapies with stereochemistry will create opportunities to mitigate unwanted cleavage and also open allele-specific specific targeting involving causative or associated non-causative genetic variations.

Through these studies, we have demonstrated an ability to use stereochemistry to control cleavage and reduce off-target cleavage. We believe these findings can be applied in the design of nucleic acid therapies that target a range of variation-specific disease targets.

Immunogenicity

We investigated the relationship between stereochemistry and immunogenicity, which is the ability of a substance to activate an immune response. Immune activation has been observed with PS modified oligonucleotides in preclinical toxicology studies, and flu-like symptoms and injection-site reactions in clinical studies are believed to be immune mediated.

Using non-human primate serum we analyzed the activation of the complement system following exposure to our panel of individual stereoisomers and the parent stereomixtures. Each isomer and parent stereomixture were incubated at physiological temperature in non-human primate serum from three individual animals. Samples were removed at the indicated times and complement activation was measured by measuring the increase in C3a levels using the enzyme-linked immunosorbent assay (ELISA) analytical method according to the information provided in the assay kit.



As shown above, equal concentrations of stereoisomers (dotted lines) and the stereomixture (solid line) exhibited differences in the levels of C3a. Gray triangles represent activation using a control solution of water. Certain stereoisomers showed greater than twice the reduction in C3a compared to the stereomixture. We believe that, based on these studies, it is possible to modulate complement activation and potentially reduce immunogenicity of PS-modified oligonucleotides by controlling stereochemistry.

Our Strategy

We are leveraging our innovative platform to design, develop and commercialize optimized nucleic acid therapeutics that address important unmet medical needs. The key components of our strategy are as follows:

- ***Rapidly advance product candidates.*** We are initially focused on designing single-stranded nucleic acid therapeutics that can distribute broadly within the human body, allowing us to target diseases across multiple organ systems and tissues, through both systemic and local administration. Our most advanced therapeutic programs are in Huntington's disease, DMD and IBD. In Huntington's disease, we have programs targeting HTT SNP-1 and HTT SNP-2; in DMD, we are targeting Exon 51; and in IBD, we are targeting SMAD7. We have product candidates in our programs targeting HTT SNP-1 and Exon 51, and we expect to select lead candidates in our HTT SNP-2 and SMAD7 programs in late 2015 and early 2016, respectively. We expect to file INDs with the FDA for each of these candidates in 2016 and early 2017. We

also have late-stage discovery programs in epidermolysis bullosa simplex, in which we are targeting KRT14 SNP-1 and KRT14 SNP-2, and in DMD, in which we are focused on an additional DMD target, AcRIIb. We expect to identify lead candidates for these programs in 2016.

- ***Expand our pipeline in the area of orphan diseases***. We intend to continue to expand our pipeline in the area of orphan diseases to provide multiple opportunities for clinical and commercial success and demonstrate the breadth of our abilities across multiple organ systems and tissues and therapeutic modalities. We believe that, based on our initial selection criteria of novel and fast-follower opportunities, our platform can potentially be used in the near-term to design treatments for approximately 25 other target indications, mostly consisting of orphan indications, with an initial focus on orphan neuromuscular and central nervous system disease targets.
- ***Establish opportunistic strategic partnerships***. We intend to collaborate selectively and opportunistically with pharmaceutical and biotechnology companies in the development and commercialization of nucleic acid therapeutics targeting certain orphan and broad indications. We expect to pursue such partnerships primarily when we believe they will significantly accelerate and enhance the clinical and commercial potential of a given development program.
- ***Leverage and expand our intellectual property portfolio***. We believe we have a strong intellectual property position relating to the design, development and commercialization of stereopure nucleic acid therapeutics. We intend to file new patent applications and take other steps to leverage, expand and enforce our intellectual property position.
- ***Maintain and extend our leadership in oligonucleotide stereochemistry***. We plan to establish a dominant position in the field of oligonucleotide stereochemistry, advancing basic research and pharmacology across multiple therapeutic modalities and target classes.

Our Pipeline

We are developing nucleic acid therapeutics that are capable of targeting diseases in a wide range of organ systems and tissues. Based on our design principles, we have the ability to rapidly design and select lead therapeutic candidates with optimized pharmacological properties.

Our most advanced therapeutic programs are in Huntington's disease, DMD and IBD. In Huntington's disease, we have programs targeting HTT SNP-1 and HTT SNP-2; in DMD, we are targeting Exon 51; and in IBD, we are targeting SMAD7. We have product candidates in our programs targeting HTT SNP-1 and Exon 51, and we expect to select lead candidates in our HTT SNP-2 and SMAD7 programs in late 2015 and early 2016, respectively. We expect to file INDs with the FDA for each of these candidates in 2016 and early 2017. See "—Our Initial Therapeutic Candidates" for more information about these targets.

We have late-stage discovery programs in epidermolysis bullosa simplex, in which we are targeting KRT14 SNP-1 and KRT14 SNP-2, and in DMD, in which we are focused on an additional DMD target, AcRIIb. We expect to identify lead candidates for these programs in 2016. See "—Our Late-Stage Discovery Programs" for more information about these targets.

We also have early-stage discovery programs in which we are focused on screening activities and lead optimization for potential drug candidates targeting eye, hepatic and neuromuscular and central nervous system diseases.

We believe that, based on our initial selection criteria of novel and fast-follower opportunities, our platform can potentially be used in the near-term to design treatments for a number other target indications, mostly consisting of orphan indications.

Our therapeutic programs and late-stage and early-stage disocvery programs are summarized in the table below.

			MECHANISM OF ACTION			MILESTONES	
			SILENCING				
TISSUE	DISEASE	TARGET	ALLELE SPECIFIC	NON-ALLELE SPECIFIC	EXON SKIPPING	NEXT 12 MONTHS	12-24 MONTHS
Therapeutic programs							
CNS	Huntington's disease	HTT SNP-1	ü			IND-enabling studies	File IND, initiate Phase 1/2a
CNS	Huntington's disease	HTT SNP-2	ü			Candidate selection	File IND, initiate Phase 1/2a
Neuromuscular	Duchenne muscular dystrophy	Exon 51			ü	IND-enabling studies	File IND, initiate Phase 1/2a
GI	Inflammatory bowel disease	SMAD7		ü		Candidate selection	File IND, initiate Phase 1/2a
Late stage discovery programs							
Skin	Epidermolysis bullosa simplex	KRT14 SNP-1	ü			Lead optimization, candidate selection	File IND, initiate Phase 1/2a
Skin	Epidermolysis bullosa simplex	KRT14 SNP-2	ü			Lead optimization, candidate selection	File IND, initiate Phase 1/2a
Neuromuscular	Duchenne muscular dystrophy	AcRIIb		ü		Lead optimization, candidate selection	File IND, initiate Phase 1/2a
Early discovery programs							
Eye	Rare genetic disease	Undisclosed	ü			Screening and lead optimization	Candidate selection
Hepatic	Undisclosed (GalNAc and non-GalNAc)	Undisclosed	ü	ü		Screening and lead optimization	Candidate selection
Neuromuscular	Undisclosed (multiple)	Undisclosed	ü	ü	ü	Screening and lead optimization	Candidate selection
CNS	Undisclosed (multiple; HTT SNP-3)	Undisclosed	ü	ü		Screening and lead optimization	Candidate selection

Our Initial Therapeutic Candidates

We are currently focused on developing nucleic acid therapies for Huntington's disease, Duchenne muscular dystrophy and inflammatory bowel disease.

Huntington's Disease

Background and Market Opportunity

Huntington's disease is an orphan hereditary neurodegenerative disease that is fatal and for which there is no cure. Huntington's disease results from the accumulation of the defective gene product huntingtin, which promotes the degeneration of neurons, and can lead to neuronal cell death, causing motor, cognitive and psychiatric disability. Symptoms typically appear between the ages of 35 and 44 and worsen over the next 10 to 20 years. Many describe the symptoms of Huntington's disease as having amyotrophic lateral sclerosis, or ALS, Parkinson's disease and Alzheimer's disease simultaneously. Patients experience a gradual reduction in motor function and psychological disturbances. Ultimately, the affected individual succumbs to pneumonia, heart failure or other fatal complications. Life expectancy after symptom onset is approximately 20 years. We estimate that approximately 43,000 people in the United States have Huntington's disease.

Current Treatments

Currently, there are no approved treatments that can reverse or slow down the course of Huntington's disease. Some of the symptoms of Huntington's disease can be managed with medication and therapies. Antipsychotics and other drugs affecting the dopamine pathways are used for symptom control. Lowering the levels of mutant huntingtin

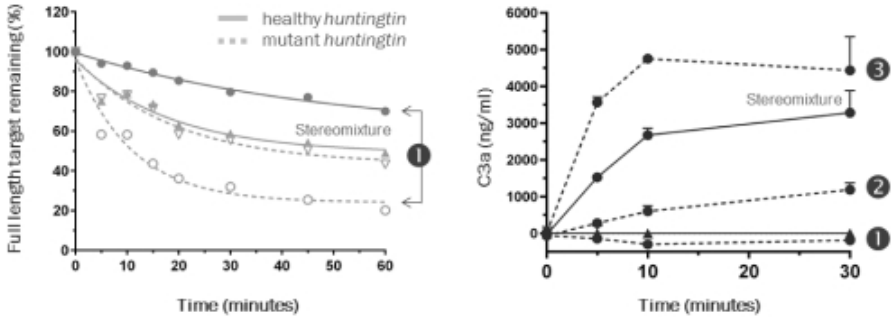
protein has demonstrated therapeutic effects in animal models. Roche and Isis Pharmaceuticals have antisense oligonucleotides to silence the *huntingtin* gene in Phase 1/2a clinical development, with human trials having commenced in July 2015.

Our Program

We are advancing multiple therapeutic candidates targeting single nucleotide polymorphisms, or SNPs, associated with the mutant alleles of *huntingtin* gene. We have selected a lead candidate in our HTT SNP-1 program and have initiated IND-enabling preclinical studies in that program. We expect to identify a lead candidate in our HTT SNP-2 program in late 2015. The precise targeting of such alleles by stereochemically controlled, or stereopure, oligonucleotides should allow discrimination and selective silencing of *huntingtin* alleles associated with manifestations of the disease while leaving functional *huntingtin* alleles intact. Each SNP has a particular demographic distribution, and defines a subpopulation of patients suited for allele-specific interventions. Approximately 80% of the total patient population is associated with one of the three most common SNPs. Therefore, we are attempting to develop oligonucleotides targeting these three SNPs, as they represent the largest unmet need.

We intend to advance our first programs into non-human primate studies to establish the safety and distribution of our stereopure antisense oligonucleotides in the central nervous system. Upon the completion of a rigorous toxicology program in non-human primates, we intend to file an IND and conduct early-stage clinical trials to establish the safety and tolerability, pharmacokinetics and surrogate evidence of therapeutic benefits in patients with manifest Huntington's disease. Route of administration will be intrathecal, by simple spinal tap or by the insertion of a spinal catheter, depending on the frequency of administration. We expect to dose on a monthly basis or potentially less frequently. Single ascending doses will be rapidly escalated to establish the maximum tolerated dose and guide our selection of doses for potential multiple dose studies. We believe that the recently demonstrated ability to distinguish the mutant and the wild-type huntingtin protein in the cerebral spinal fluid will enable us to rapidly demonstrate clinical proof-of-concept for target engagement and allele selectivity.

As shown below, *huntingtin* targeted stereoisomer 1 (circles) or stereomixture (triangles) drugs were bound to healthy and mutant *huntingtin* mRNA and incubated with human RNase H (left figure). Catalysis mediated by the stereopure drug increased the degree of knockdown while also discriminating between healthy versus mutant *huntingtin*, compared with the stereomixture.



Using non-human primate serum, we analyzed the activation of the complement system following exposure to a panel of *huntingtin* targeted stereoisomers and the parent stereomixture. Each isomer and parent stereomixture was incubated at physiological temperature in non-human primate serum from three individual animals. Samples were removed at the indicated times and complement activation was measured by the increase in C3a levels using the ELISA analytical method according to the information provided in the assay kit. As shown above (right figure), certain stereoisomers and the stereomixture demonstrated increased production of C3a, notably stereoisomer 3, however there was no production of C3a following exposure to stereoisomer 1, which showed discrimination between heathy and mutant *huntingtin*.

We expect to file an IND for our therapeutic candidate targeting HTT SNP-1 in late 2016 and our therapeutic candidate targeting HTT SNP-2 in early 2017.

Duchenne Muscular Dystrophy

Background and Market Opportunity

DMD is a genetic disorder caused by mutations in the *dystrophin* gene on the X chromosome that affects approximately one in 3,500 newborn boys around the world. In skeletal and cardiac muscles, the dystrophin protein is part of a protein complex called the dystrophin-associated protein complex that acts as an anchor, connecting each muscle cell's structural framework with the lattice of proteins and other molecules outside the cell through the muscle cell membrane. The dystrophin-associated protein complex protects the muscle from injury during contraction and relaxation. DMD patients typically develop muscle weakness in the early years of life and become wheelchair-bound in their early teens. As the disease progresses, DMD patients typically develop respiratory, orthopedic and cardiac complications. Cardiomyopathy and breathing difficulties usually begin by the age of 20 and patients typically die from respiratory failure or lung disorders by age 25.

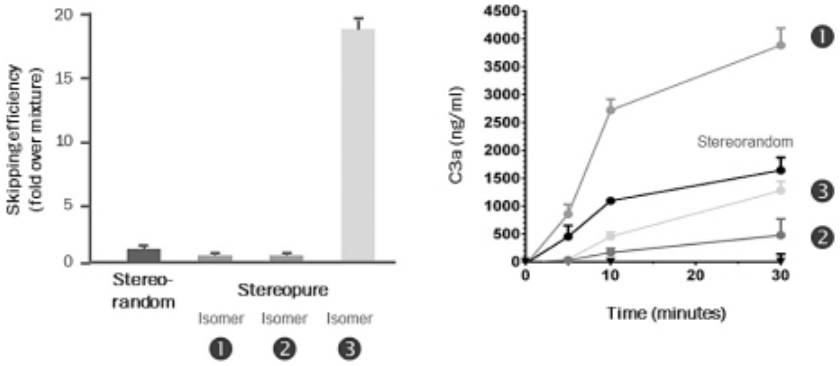
Current Treatments

Currently, there are no approved treatments that can reverse or slow down the progression of DMD. Corticosteroids and physical and respiratory therapy are used in DMD patients to slow the decline in muscle strength and to prolong ambulation and respiratory function. One disease-modifying strategy in DMD is exon skipping. Exon skipping allows for the production of internally deleted, but functional, dystrophin protein instead of a dysfunctional, truncated one. In Europe, conditional market authorization has been granted to PTC Therapeutics' Ataluren (TRANSLARNA) for the treatment of nonsense mutation DMD for ambulatory patients who are 5 years or older. In addition, there are two exon skipping nucleic acid therapeutic candidates currently undergoing regulatory review in the United States: BioMarin Pharmaceutical's DRISAPERSEN and Sarepta Therapeutics's ETEPLIRSEN.

Our Program

We are developing stereochemically optimized oligonucleotides that we believe have superior pharmacology attributes as compared to stereomixtures. Using a variety of preclinical *in vitro* assays, we have selected our product candidate targeting Exon 51, which affects 13% of the DMD patient population.

Our product candidate for the treatment of Exon 51 was selected, in part, based on its ability to demonstrate efficient restoration of the production of functionally active dystrophin. Using patient-derived cells, we assessed exon skipping efficiency by measuring Exon 51 skipped RNA following exposure to equal concentrations of stereorandom or stereopure oligonucleotides. As shown below (left figure), certain stereopure oligonucleotides were identified that had increased and decreased exon skipping efficiency compared to stereorandom mixture, including stereoisomer 3, which possessed a large increase in skipping efficiency compared with the stereorandom mixture.



Using non-human primate serum, we analyzed the activation of the complement system following exposure to exon skipping stereoisomers and the parent stereomixture. Each isomer and parent stereomixture was incubated at physiological temperature in non-human primate serum from three individual animals. Samples were removed at the indicated times and complement activation was measured by measuring the increase in C3a levels using the ELISA analytical method according to the information provided in the assay kit. As shown above (right figure), certain

stereoisomers demonstrated increased production of C3a, notably stereoisomer 1. Production of C3a from stereoisomer 3, which showed increased exon skipping efficiency, was lower than production from the mixture.

We believe that the use of a stereopure compound (in contrast with a stereomixture) will reduce adverse events noted with stereomixtures, such as injection site reactions, renal toxicity and thrombocytopenia. Following the filing of an IND in the United States or a Clinical Trial Authorization in Europe, we intend to conduct early-stage clinical trials to establish safety, tolerability, pharmacokinetics and efficient exon skipping. The efficiency of exon skipping will be measured by the *de novo* production of internally deleted, but functional, dystrophin in muscle biopsies as the basis for any improvement of muscle strength, which is an anticipated clinical endpoint of later clinical studies.

We expect to file an IND for our first therapeutic candidate in DMD in late 2016.

Inflammatory Bowel Disease

Background and Market Opportunity

Inflammatory bowel disease involves chronic inflammation of all or part of the digestive tract, which may be caused by a dysregulated immune response to host bacteria present in the intestine. There are two primary types of IBD: ulcerative colitis, or UC, and Crohn's disease, or CD. According to the Centers for Disease Control and Prevention, or the CDC, approximately 1.3 million people in the United States have IBD. Based on data from the CDC, we estimate that approximately 600,000 of these individuals have CD and 700,000 have UC. Patients with IBD are typically diagnosed by the age of 30, and symptoms are highly variable in frequency and intensity.

CD is a chronic inflammatory disease of the digestive tract that primarily affects the terminal ileum and right colon, but may affect any region of the gastrointestinal tract. CD-related inflammation is segmental and transmural, leading to various degrees of tissue damage. At disease onset, most patients have inflammatory lesions, which become predominantly strictures or penetrating lesions over time.

UC is a chronic inflammatory disease of the innermost lining of the colon and rectum, together known as the large intestine, in which the lining becomes inflamed and develops tiny open sores, or ulcers, that produce pus and mucous. The combination of inflammation and ulceration can cause abdominal discomfort and frequent emptying of the colon. UC is believed to be the result of an abnormal response by the body's immune system, which sends white blood cells into the lining of the large intestine, where they produce chronic inflammation and ulcerations.

Current Treatments

The goal of current treatments for IBD is to reduce inflammation that triggers signs and symptoms, which may lead to symptom relief, long-term remission and a reduced risk of complications. Mucosal healing can be promoted with the use of immunosuppressive drugs and anti–tumor necrosis factor a, or TNF-a, antibodies; however, more than one third of patients do not have a response to these therapies. The efficacy of these therapies may also diminish over time, and they can increase a patient's risk of opportunistic infections and cancer. While UC can be cured by colectomy, currently there is no known cure for CD.

Recently reported clinical results related to the use of a first-generation, stereorandom antisense oligonucleotide (MONGERSEN) targeting SMAD7, a protein of the SMAD family involved in the signal transduction pathway of TGF-B and its receptors, which is present in abundant concentration in inflamed intestinal tissues, have been encouraging. In a 160-patient, Phase 2 trial, MONGERSEN induced pronounced and sustained relief of the inflammation and related symptoms of CD. Celgene Corporation is currently developing MONGERSEN, for the treatment of terminal ileitis, the most frequent form of CD. Idera Pharmaceuticals is currently conducting a Phase 1 clinical trial in healthy volunteers for a Toll-Like Receptor antagonist (IMO-9200), which an oligonucleotide-based therapy. Idera Pharmaceuticals intends to initiate further development of IMO-9200 in a selected autoimmune disease indication in the future.

Our Program

We are developing stereochemically optimized antisense oligonucleotides against SMAD7, which should result in superior activity and durability over stereomixtures. Our initial goal is to design different stereochemistries optimized for antisense, translational blockade or immune modulating *in vitro* activity and select our lead therapeutic candidate based on its performance on an efficacy model of IBD. We also plan to collaborate with a third-party contract manufacturing organization to produce oral, gastro-resistant, solid formulations (tablets or capsules) that are

able to deliver the stereopure oligonucleotides at the desired site of gastrointestinal inflammation, which we refer to as encapsulated oligonucleotides. Our selected lead therapeutic candidate would undergo the customary Chemistry and Manufacturing Controls, or CMC, and toxicology programs in preparation for the filing of an IND. Following our filing of an IND, we would expect to conduct clinical trials leveraging the availability of endoscopic and mucosal healing endpoints as early evidences of therapeutic potential, and as short-term surrogates for the clinical endpoints we would expect to use in late-stage and registration studies.

We expect to file an IND for our therapeutic candidate in IBD in 2017.

Our Late-Stage Discovery Programs

Duchenne Muscular Dystrophy

Our Program

In addition to our previously described program relating to the development of exon skipping nucleic acid therapeutic candidates for the treatment of DMD, we are investigating other novel approaches to treat DMD, especially in the advanced stages of the disease. Restoration of dystrophin using exon skipping approaches alone may be less effective in situations where disease has progressed to a state of advanced muscle damage. To promote skeletal muscle growth, we are investigating antisense-mediated myostatin pathway inhibitors at the ligand and receptor level, by targeting AcRIIb. We will investigate these inhibitors alone and in combination with our exon skipping therapeutic candidates.

Epidermolysis Bullosa Simplex

Background and Market Opportunity

Epidermolysis bullosa simplex is an autosomal dominant genetic condition that causes the skin to become very fragile and blister easily. Blisters and areas of skin loss occur in response to minor injury or friction, such as rubbing or scratching. The signs and symptoms of this condition vary widely among affected individuals. Blistering primarily affects the hands and feet in mild cases, and the blisters usually heal without leaving scars. Severe cases of this condition involve widespread blistering that can lead to infections, dehydration, and other medical problems. Severe cases may be life-threatening in infancy. Researchers have identified four major types of epidermolysis bullosa simplex. Although the types differ in severity, their features overlap significantly, and they are caused by mutations in the same genes. We estimate that approximately 6,300 people in the United States have epidermolysis bullosa simplex.

Current Treatments

Epidermolysis bullosa simplex has no known cure, though mild forms may improve with age. Treatment focuses on addressing the symptoms, such as infection and itching, and preventing pain and wounds. Severe forms may cause serious complications and can be fatal.

Our Program

We are investigating allele-selective antisense oligonucleotides against SNPs widely associated with causative mutations in *KRT14* gene, which produces the Keratin 14 protein. We and our collaborators have identified single SNPs in *KRT14* that provide coverage for approximately 46% of the EBS population. In EBS preclinical models, it has been shown that allele-specific reduction in expression of the mutant keratin genes can prevent the skin-blistering phenotype. Due to the absence of appropriate transgenic SNP models, we are advancing topical formulation development efforts with our collaborators alongside *in vitro* optimization of allele-specific targeting agents. Additionally, we are working with leading clinicians and translational scientists in the United Kingdom to establish well-controlled experimental medicine studies in patients with EBS.

We expect investigator-sponsored studies of our therapeutic candidates for EBS to be initiated in early 2017.

Licensing Arrangements and Research Collaborations

Our business strategy is to develop and commercialize a broad pipeline of nucleic acid therapies. As part of this strategy, we have entered into, and expect to enter into additional, license and research collaboration agreements as a means of advancing our own investigational nucleic acid therapeutic programs and leveraging our synthetic chemistry drug development platform to optimize the therapies being developed by our partners.

Our Technology Licenses

Max-Planck-Innovation GmbH

In June 2015, we entered into an agreement with Max-Planck-Innovation GmbH, or MI, pursuant to which we obtained a co-exclusive royalty-bearing, worldwide license, with the right to sublicense, to research, develop, manufacture and commercialize products in all fields of use under certain patent rights owned by Max-Planck-Gesellschaft, or MPG, and patent rights owned by University of Massachusetts Medical School, or UMMS, which has been granted to us by MI, a wholly-owned subsidiary of MPG, acting as MPG's technology transfer agency and UMMS's authorized licensing agency for such patents. MPG and MI are collectively referred to herein as Max-Planck.

Our patent rights under this license are to patent filings that relate to certain sequence and structural features of single-stranded RNA molecules that mediate target-specific RNA interference, and include both filings that are owned by Max Planck and arose from research conducted by Thomas Tuschl, Ph.D. and his colleagues at the Max-Planck-Institute for Biophysical Chemistry, and also an issued U.S. patent owned by the University of Massachusetts, or UMASS, that prevailed in an interference with one of the Max-Planck filings and was subsequently included, through a separate agreement between Max-Planck and UMASS, within the portfolio that Max-Planck is authorized to license. The Max-Planck licensed patent portfolio includes issued U.S. and Canadian patents, and pending U.S. and European patent applications, each of which has a projected 20 year term that extends into 2023. We intend to develop and commercialize diagnostic and therapeutic products based on our patent rights under this license, although currently we do not rely on the patent rights under this license for any of our drug candidates under development in our therapeutic or discovery programs. Max-Planck retains the right to practice the intellectual property licensed under the agreement for non-commercial purposes.

Our license is one of two maximum allowable co-exclusive licenses for these patents, the other of which is currently held by Isis Pharmaceuticals, Inc., or Isis. If either we or Isis terminates its respective co-exclusive portion of the license, Max-Planck is obligated to grant the other party an exclusive license on substantially the same terms and conditions previously applicable to the terminated co-exclusive licensee.

Under certain conditions, we are permitted to sublicense our rights under the license. The license requires that we use commercially reasonable efforts to develop and commercialize products under the agreement, whether solely or through our affiliates and sublicensees. In order to secure the license, we made an upfront payment of less than $0.1 million to Max-Planck. Additionally, starting on the first anniversary of the agreement, we will be required to pay annual license maintenance fees of less than $0.1 million to Max-Planck which will be credited against any royalties payable for the applicable calendar year. We will be required to make payments based upon regulatory milestones, including the initiation of clinical trials, and product approval milestones totaling up to $1.6 million for each licensed product reaching such clinical stage, provided that such milestone payments will only be payable once per target irrespective of the number of licensed products targeting such target to achieve such milestones. In addition to milestone payments, we will be required to pay royalties of a percentage of cumulative annual net sales of a licensed product commercialized by us, our affiliates and sublicensees. The percentage is in the low single
digits. The royalties payable to Max-Planck are subject to reduction for any third party payments required to be made, with a minimum floor in the low single digits. If we grant a sublicense of our rights under this license, we will be obligated to pay Max-Planck a percentage of specified sublicensing consideration received from such sublicensee attributable to the sublicense granted under the licensed patents, ranging from the mid-single digits to the low thirties depending on the stage of development at the time the sublicense is executed.

We may unilaterally terminate the license agreement upon 90 days' prior written notice and payment of all accrued amounts owing to Max-Planck. Max-Planck may terminate the agreement upon 30 days' prior written notice if we challenge the validity of its patents, upon 30 days' prior written notice if we undergo a change of control and cannot demonstrate that we will maintain a development and commercialization program that is substantially similar or greater in scope than the program prior to the change of control event, or in the event of our material breach which remains uncured after 60 days of receiving written notice of such breach (or 45 days in the case of nonpayment). Absent early termination, the agreement will automatically terminate upon the later of the expiration or abandonment of all issued patents and filed patent applications with the patent rights covered by the agreement or April 28, 2019.

Our Research Collaborations

University of Oxford; Professor Matthew Wood's Laboratory

In April 2015, we entered into a translational research collaboration agreement with The Chancellor, Masters, and Scholars of the University of Oxford, or Oxford. Research under this collaboration is being conducted by Dr. Matthew J.A. Wood, Professor of Neuroscience at the University of Oxford and Co-Director of the Oxford Centre for Neuromuscular Science. Dr. Wood's research is in the field of degenerative disorders of the nervous system and muscle. His laboratory's main focus is the investigation of novel therapeutic approaches utilizing short nucleic acids to target messenger RNA, or mRNA. His current work is investigating the potential of single-stranded antisense oligonucleotides for the modification of mRNA splicing, for example in Duchenne muscular dystrophy. In addition, his investigation includes the potential of double-stranded RNA for gene silencing, or RNAi, for the silencing of target genes and mutant alleles both in muscle and in the nervous system.

Our research collaboration with Oxford involves characterizing our proprietary isomers in order to improve the pharmacology of oligonucleotides for the treatment of DMD. Under the agreement, both parties are obligated to use reasonable endeavors to carry out the research project in accordance with the agreed upon research plan. Under the agreement, we have agreed to pay Oxford up to $0.4 million to conduct specified research services for our benefit during an initial 18-month term, which may be extended by the parties.

We will own the results of the research conducted under the collaboration, including any potential intellectual property inventions, and we may, at our own expense, elect to register and maintain any protection for the intellectual property included in or arising or derived from the results of the research, including patent applications, without payment of any additional compensation to Oxford. The agreement does not affect the respective ownership rights of any background information, intellectual property, technology, design or know-how owned by the parties that are not results of the research conducted under the collaboration. Oxford retains the right to use the results of the research for purposes of Oxfords' own internal academic teaching and other scholarly uses undertaken solely for education and academic research.

Either we or Oxford may terminate the research collaboration in the event of the other party's breach of the agreement if such breach is capable of cure but remains uncured after 60 days of receiving written notice of such breach, or upon the occurrence of certain bankruptcy events.

The Children's Hospital of Philadelphia; Dr. Beverly Davidson's Laboratory

In April 2015, we entered into a master sponsored research agreement with The Children's Hospital of Philadelphia, or CHOP, which employs Dr. Beverly Davidson, who is the principal investigator under the first research project under the agreement. Dr. Davidson is the director of the Center for Cellular and Molecular Therapeutics at CHOP, a Professor at the University of Pennsylvania and a scientific co-founder of and advisor to Spark Therapeutics, Inc. Dr. Davidson and her laboratory team have succeeded in reversing neurological deficits in small and large animal models of disease, and are working to advance this approach to treating human diseases such as Huntington's disease. In these studies, she has delivered forms of RNA to the brains of animals to silence the activity of disease-associated genes. Our agreement requires that all research for this first project be conducted in Dr. Davidson's laboratory at CHOP.

Our research collaboration with CHOP involves characterization of our proprietary isomers for the treatment of Huntington's disease. Under the agreement, for this first research project we have agreed to pay CHOP up to approximately $0.2 million to conduct specified research activities, on a project-by-project basis, for our benefit. Additional research projects may be agreed upon by CHOP and the company under the agreement. The term of the research collaboration will end during a term that ends on the later of the five-year anniversary or the date that the last research project is completed.

Each party shall be the sole owner of any intellectual property resulting from the research collaboration that is created solely by on or behalf of such party pursuant to the performance of research activities under the agreement. Similarly, the parties shall be joint owners of intellectual property created jointly under the agreement. Prior to us exercising an option to license any such intellectual property (as described below), CHOP is responsible for preparing, prosecuting and maintaining all patents related to CHOP intellectual property and joint intellectual property and we are responsible for reimbursing CHOP for the costs associated with the protection of such

intellectual property that we request CHOP to protect. In addition, we have a first and exclusive option to negotiate for a revenue-bearing license, exclusive or non-exclusive at our election, under all of CHOP's interest in and to the CHOP intellectual property and the joint intellectual property resulting from each research project performed under the agreement, provided that we pay all costs for the preparation, filing, prosecution and maintenance of patents or other intellectual property protection in the case of an exclusive license or our pro rata costs in the case of a non-exclusive license. Each such option expires 90 days after CHOP's disclosure of the intellectual property to us. If we elect to exercise an option for a license, then we have six months to negotiate and enter into such license with CHOP. Furthermore, if certain background or enabling intellectual property is held by CHOP that would be necessary for us to obtain rights to develop and exploit the CHOP or joint intellectual property that we elect to license, then such license rights to such blocking intellectual property will be added to our license for the applicable option exercise.

We may terminate the agreement at any time upon 30 days' prior written notice to CHOP. In addition, we may terminate the agreement with immediate effect if CHOP is unable to perform the requested research, materially breaches the agreement and fails to cure such breach within 30 days after receiving written notice of such breach, if performance of the agreement would violate the law or upon the occurrence of certain CHOP bankruptcy events.

CHOP may terminate the agreement if we materially breach the agreement and do not cure such breach within 30 days after receiving written notice of such breach from CHOP.

University of Dundee

In September 2015, we entered into a research collaboration agreement with the University of Dundee, or Dundee. Our research collaboration with Dundee involves characterizing our proprietary isomers in order to improve the pharmacology of oligonucleotides for the treatment of EBS. Under the agreement, both parties are obligated to use reasonable endeavors to carry out the research project in accordance with the agreed upon research plan. Under the agreement, Dundee has agreed to conduct specified research services for our benefit during an initial two-year term, which may be extended by the parties.

We will own the results of the research conducted under the collaboration, including any potential intellectual property inventions, and we may, at our own expense, elect to register and maintain any protection for the intellectual property included in or arising or derived from the results of the research, including patent applications, without payment of any additional compensation to Dundee. The agreement does not affect the respective ownership rights of any background information, intellectual property, technology, design or know-how owned by the parties that are not results of the research conducted under the collaboration. Dundee retains the right to use the results of the research for purposes of Dundee's own internal academic teaching and other scholarly uses undertaken solely for education and academic research.

Either we or Dundee may terminate the research collaboration in the event of the other party's breach of the agreement, if such breach is capable of cure, but remains uncured after 60 days of receiving written notice of such breach, or upon the occurrence of certain bankruptcy events.

Manufacturing

To date, we have manufactured only limited supplies of drug substance for use in IND-enabling toxicology studies in animals at our own facility and have contracted with several third-party contract manufacturing organizations for the supply of drug substance and finished product to meet our testing needs for preclinical toxicology and clinical testing. We may continue to rely on third-party contract manufacturing organizations for the supply of drug substance and certain drug product for our product candidates for the foreseeable future. In the future, we may also develop our own capabilities to manufacture drug substance for human clinical use. Commercial quantities of any drugs that we may seek to develop will have to be manufactured in facilities, and by processes, that comply with FDA regulations and other federal, state and local regulations, as well as comparable foreign regulations.

We believe we have sufficient manufacturing capacity through our third-party contract manufacturers and our internal GLP manufacturing facility to meet our current research, clinical and early-stage commercial needs. We believe that the supply capacity we have established externally, together with the internal capacity we developed to support preclinical trials, will be sufficient to meet our anticipated needs for the next several years. We monitor the

capacity availability for the manufacture of drug substance and drug product and believe that our supply agreements with our contract manufactures and the lead times for new supply agreements would allow us to access additional capacity to meet our currently anticipated needs. We also believe that our products can be manufactured at a scale and with production and procurement efficiencies that will result in commercially competitive costs.

Research and Development

Since commencing operations, we have dedicated a significant portion of our resources to research and development activities, including our therapeutic programs. We incurred research and development expenses of $1.9 million and $2.4 million during the years ended December 31, 2013 and 2014, respectively, and $1.1 million and $3.5 million during the six months ended June 30, 2014 and 2015, respectively. We anticipate that a significant portion of our operating expenses will continue to be related to research and development as we continue to advance our therapeutic programs.

Intellectual Property

We own or have rights to worldwide patent filings that protect our proprietary technologies for manufacturing stereochemically pure oligonucleotide compositions, and also protect compositions themselves, as well as methods of using them, including in the treatment of diseases. As of the date of this prospectus, our portfolio included at least three issued U.S. patents, at least four issued foreign patents and pending applications in at least 17 jurisdictions.

Synthetic Methodologies

Our patent portfolio includes multiple families that protect synthetic methodologies and/or key reagents for generating stereochemically pure oligonucleotide compositions. Certain synthetic methodologies are covered by families licensed from the University of Tokyo which include two issued Japanese patents and have terms that extend into 2022-2025.

Additional synthetic methodologies are protected by families that we own , including one with issued patents in Japan and Singapore and pending applications in Australia, Brazil, Canada, China, Europe, India, Japan, Russia, Singapore, South Korea and the U.S. that has a 20-year expiration date in December 2029 and one with pending applications in Australia, Brazil, Canada, Chile, China, Europe, India, Indonesia, Israel, Japan, Mexico, Russia, Singapore, South Africa, South Korea and the United States that has a 20-year expiration date in July 2033.

Certain modification methods and reagents are protected by families that we own, that have pending applications in Australia, Brazil, Canada, Chile, China, Europe, India, Indonesia, Israel, Japan, Mexico, Russia, Singapore, South Africa, South Korea and the United States, and have 20-year expiration dates in July 2030 and July 2032, respectively.

We also own or co-own (with either the University of Tokyo or Shin Nippon Biomedical Laboratories, Ltd.) certain filings that are particularly directed to methods and reagents for synthesizing RNA oligonucleotides. These include issued patents in the United States, and pending applications in China, Europe, Japan and the United States; their 20-year expiration dates fall in 2030 and 2031.

Stereochemically Pure Oligonucleotide Compositions

Certain of our patent filings protect stereochemically pure compositions, particularly of therapeutically relevant oligonucleotides. Some such filings are directed to compositions whose oligonucleotides are characterized by particular patterns of chemical modifications (including bases, sugars and/or internucleotidic linkages) and/or of internucleotidic linkage stereochemistry. Specific compositions designed for use in the treatment of particular diseases (e.g., Huntington’s disease, etc.), were also described. One such family, owned by us, is pending in Australia, Brazil, Canada, Chile, China, Europe, India, Indonesia, Israel, Japan, Mexico, Russia, Singapore, South Africa and South Korea, and has a 20-year term extending into July 2033; another, also owned by us, is pending in the International Phase (i.e., the PCT), and has a 20-year term extending into January 2035. This latter family includes data demonstrating key valuable attributes of particular stereochemically pure oligonucleotide compositions that act as antisense agents.

We also own various patent families that relate to stereochemically pure oligonucleotide adjuvant compositions. These include pending filings in Australia, Brazil, Canada, China, Europe, Japan, India, Israel, Mexico, Russia, Singapore, South Korea, the United Arab Emirates, the United States, and in the International Phase, and have 20-year terms extending into 2033-2035.

Filings that protect compositions are also directed to methods of using such compositions, for example in the treatment of particular diseases.

Future Filings

We maintain a thoughtful and ambitious program for developing and protecting additional intellectual property, including new synthetic methodologies and reagents. We also intend to prepare and submit patent filings specifically directed to protecting individual product candidates and their uses as we finalize leads and collect relevant data, which is expected to include comparison data confirming novel and/or beneficial attributes of our product candidates.

Singapore Intellectual Property Law

Section 34 of the Singapore Patents Act provides that a person residing in Singapore is required to obtain written authorization from the Singapore Registrar of Patents before filing an application for a patent for an invention outside of Singapore. A violation of Section 34 is criminal offense punishable by a fine not exceeding S$5,000, or imprisonment for a term not exceeding two years, or both. If the Registrar does not issue any direction prohibiting or restricting the publication or communication of information contained in the patent application within two months after the request for authorization is filed, the applicant may file a patent application for that invention in another jurisdiction. If a person unintentionally violates Section 34, the Registrar may grant relief upon payment of a fine not exceeding S$2,000.

Competition

The pharmaceutical marketplace is characterized by rapidly advancing technologies, intense competition and a strong emphasis on proprietary products. While we believe that our expertise in nucleic acid therapeutics, scientific knowledge and intellectual property estate provide us with competitive advantages, we face potential competition from many different sources, including major pharmaceutical, specialty pharmaceutical and biotechnology companies, academic institutions, governmental agencies and public and private research institutions. Not only must we compete with other companies that are focused on nucleic acid therapeutics, but any product candidates that we successfully develop and commercialize will compete with existing therapies and new therapies that may become available in the future.

Many of our competitors may have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals and marketing approved products than we do. These competitors also compete with us in recruiting and retaining qualified scientific and management personnel and establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs. Mergers and acquisitions in the pharmaceutical, biotechnology and diagnostic industries may result in even more resources being concentrated among a smaller number of our competitors. Smaller or early stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies.

Huntington's Disease

There are no approved treatments available to slow the progression of Huntington's disease. We believe, based on publicly available information, that (i) Isis Pharmaceuticals and Roche (Phase 1/2) and Sangamo Biosciences (preclinical) are developing therapies that directly target the *huntingtin* RNA and (ii) a number of other companies are developing drugs to treat symptoms associated with Huntington's disease, including Auspex Pharmaceuticals and Teva Pharmaceutical Industries (which have submitted an New Drug Application, or NDA, to the FDA), Prana Biotechnology (Phase 2), Siena Biotech (Phase 2), Raptor Pharmaceuticals (Phase 2), Omeros Corporation (Phase 2), Pfizer (Phase 2) and Ipsen (Phase 2), among others.

Duchenne Muscular Dystrophy

There are no therapies approved for the treatment of DMD in the United States. We believe, based on publicly available information, that (i) PTC Therapeutics, BioMarin Pharmaceuticals and Sarepta Therapeutics are each developing exon skipping nucleic acid therapies to specifically target the disease-associated exons of the *dystrophin* RNA and all have submitted an NDA to the FDA and (ii) a number of other companies, including Summit Therapeutics (Phase 1), are developing or have approval to market drugs that can alter the progression of the disease in patients.

Inflammatory Bowel Disease

There are a limited number of drugs available for the treatment of IBD (either UC or CD) including mesalazine, azathioprine, budesonide and vedoluzimab. We believe based on publicly available information that (i) Celgene is developing a nucleic acid therapy to target CD (Phase 2) and (ii) other companies either are developing or have approval to sell drugs to treat the symptoms of IBD, including Johnson & Johnson, Receptos, Pfizer, Eisai, Mylan, Novartis, Takeda and Valeant Pharmaceuticals, among others.

Government Regulation

FDA Approval Process

In the United States, pharmaceutical products are subject to extensive regulation by the FDA. The Food Drug and Cosmetic Act, or FDCA, and other federal and state statutes and regulations, govern, among other things, the research, development, testing, manufacture, storage, recordkeeping, approval, labeling, promotion and marketing, distribution, post-approval monitoring and reporting, sampling, and import and export of pharmaceutical products. Failure to comply with applicable FDA or other requirements may subject a company to a variety of administrative or judicial sanctions, such as the FDA's refusal to approve pending applications, a clinical hold, warning letters, recall or seizure of products, partial or total suspension of production, withdrawal of the product from the market, injunctions, fines, civil penalties or criminal prosecution.

FDA approval is required before any new drug, such as a new chemical entity, or a new dosage form, new use or new route of administration of a previously approved product, can be marketed in the United States. The process required by the FDA before a new drug product may be marketed in the United States generally involves:

- completion of preclinical laboratory and animal testing and formulation studies in compliance with the FDA's good laboratory practice, or GLP, regulation;
- submission to the FDA of an IND for human clinical testing which must become effective before human clinical trials may begin in the United States;
- approval by an independent institutional review board, or IRB, at each site where a clinical trial will be performed before the trial may be initiated at that site;
- performance of adequate and well-controlled human clinical trials in accordance with good clinical practices, or GCP, to establish the safety and efficacy of the proposed product candidate for each intended use;
- satisfactory completion of an FDA pre-approval inspection of the facility or facilities at which the product is manufactured to assess compliance with the FDA's cGMP regulations;
- submission to the FDA of a new product application, or NDA which must be accepted for filing by the FDA;
- satisfactory completion of an FDA advisory committee review, if applicable;
- payment of user fees, if applicable; and
- FDA review and approval of the NDA.

The preclinical and clinical testing and approval process requires substantial time, effort and financial resources. Preclinical tests include laboratory evaluation of product chemistry, formulation, manufacturing and control procedures and stability, as well as animal studies to assess the toxicity and other safety characteristics of the product. The results of preclinical tests, together with manufacturing information, analytical data and a proposed clinical trial protocol and other information, are submitted as part of an IND to the FDA. Some preclinical testing may continue even after the IND is submitted. The IND automatically becomes effective 30 days after receipt by the

FDA, unless the FDA, within the 30-day time period, raises concerns or questions and places the clinical trial on a clinical hold. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. As a result, our submission of an IND may not result in FDA authorization to commence a clinical trial. A separate submission to an existing IND must also be made for each successive clinical trial conducted during product development. Even if the IND becomes effective and the trial proceeds without initial FDA objection, the FDA may stop the trial at a later time if it has concerns, such as if unacceptable safety risks arise.

Further, an independent IRB, covering each site proposing to conduct the clinical trial must review and approve the plan for any clinical trial and informed consent information for subjects before the trial commences at that site and it must monitor the study until completed. The FDA, the IRB, or the sponsor may suspend a clinical trial at any time on various grounds, including a finding that the subjects or patients are being exposed to an unacceptable health risk or for failure to comply with the IRB's requirements, or may impose other conditions.

Clinical trials involve the administration of the investigational new product to human subjects under the supervision of qualified investigators in accordance with GCP requirements, which include the requirement that all research subjects provide their informed consent in writing for their participation in any clinical trial. Sponsors of clinical trials generally must register and report, at the NIH-maintained website ClinicalTrials.gov, key parameters of certain clinical trials. For purposes of an NDA submission and approval, human clinical trials are typically conducted in the following sequential phases, which may overlap or be combined:

- ***Phase 1***. The product is initially introduced into healthy human subjects or patients and tested for safety, dose tolerance, absorption, metabolism, distribution and excretion and, if possible, to gain an early indication of its effectiveness.
- ***Phase 2***. The product is administered to a limited patient population to identify possible adverse effects and safety risks, to preliminarily evaluate the efficacy of the product for specific targeted indications and to determine dose tolerance and optimal dosage. Multiple Phase 2 clinical trials may be conducted by the sponsor to obtain information prior to beginning larger and more extensive clinical trials.
- ***Phase 3***. These are commonly referred to as pivotal studies. When Phase 2 evaluations demonstrate that a dose range of the product appears to be effective and has an acceptable safety profile, trials are undertaken in large patient populations to further evaluate dosage, to obtain additional evidence of clinical efficacy and safety in an expanded patient population at multiple, geographically-dispersed clinical trial sites, to establish the overall risk-benefit relationship of the product and to provide adequate information for the labeling of the product.
- ***Phase 4***. In some cases, the FDA may condition approval of an NDA for a product candidate on the sponsor's agreement to conduct additional clinical trials to further assess the product's safety and effectiveness after NDA approval. Such post-approval trials are typically referred to as Phase 4 studies.

The results of product development, preclinical studies and clinical trials are submitted to the FDA as part of an NDA. NDAs must also contain extensive information relating to the product's pharmacology, chemistry, manufacturing and controls and proposed labeling, among other things.

For some products, the FDA may require a risk evaluation and mitigation strategy, or REMS, which could include measures imposed by the FDA such as prescribing restrictions, requirements for post-marketing studies or certain restrictions on distribution and use. Under federal law, the submission of most NDAs is additionally subject to a substantial application user fee, and the manufacturer and/or sponsor under an approved NDA are also subject to annual product and establishment user fees. The FDA has 60 days from its receipt of an NDA to determine whether the application will be accepted for filing based on the agency's threshold determination that it is sufficiently complete to permit substantive review. The FDA may request additional information rather than accept an NDA for filing. In this event, the NDA must be resubmitted with the additional information and is subject to payment of additional user fees. The resubmitted application is also subject to review before the FDA accepts it for filing.

Once the submission has been accepted for filing, the FDA begins an in-depth substantive review. Under the Prescription Drug User Fee Act, or PDUFA, the FDA agrees to specific performance goals for NDA review time through a two-tiered classification system, Standard Review and Priority Review. Standard Review NDAs have a goal

of being completed within a ten-month timeframe from FDA filing of the application. A Priority Review designation is given to products that offer major advances in treatment, or provide a treatment where no adequate therapy exists. The goal for completing a Priority Review is six months from filing.

The review process may be extended by the FDA for three additional months to consider certain information or obtain clarification regarding information already provided in the submission. The FDA may refer applications for novel products or products which present difficult questions of safety or efficacy to an advisory committee for review, evaluation and recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendation of an advisory committee, but it considers such recommendations carefully when making decisions.

Before approving an NDA, the FDA may inspect the facility or facilities where the product is manufactured. The FDA will not approve an application unless it determines that the manufacturing processes and facilities are in compliance with cGMP.

After the FDA evaluates the NDA and, in some cases, the related manufacturing facilities, it may issue an approval letter or a Complete Response Letter, or CRL, to indicate that the review cycle for an application is complete and that the application is not ready for approval. CRLs generally outline the deficiencies in the submission and may require substantial additional testing or information in order for the FDA to reconsider the application. Even with submission of this additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval. If and when the deficiencies have been addressed to the FDA's satisfaction, the FDA will typically issue an approval letter. An approval letter authorizes commercial marketing of the product with specific prescribing information for specific indications.

Once issued, the FDA may withdraw product approval if ongoing regulatory requirements are not met or if safety problems are identified after the product reaches the market. In addition, the FDA may require post-approval testing, including Phase 4 studies, and surveillance programs to monitor the effect of approved products which have been commercialized, and the FDA has the power to prevent or limit further marketing of a product based on the results of these post-marketing programs. Products may be marketed only for the approved indications and in accordance with the provisions of the approved label, and, even if the FDA approves a product, it may limit the approved indications for use for the product or impose other conditions, including labeling or distribution restrictions or other risk-management mechanisms, such as a Black Box Warning, which highlights a specific warning (typically life-threatening), or a REMS program. Further, if there are any modifications to the product, including changes in indications, labeling, or manufacturing processes or facilities, a company may be required to submit and obtain FDA approval of a new or supplemental NDA, which may require the company to develop additional data or conduct additional preclinical studies and clinical trials.

Post-Approval Requirements

Once an NDA is approved, a product will be subject to pervasive and continuing regulation by the FDA, including, among other things, requirements relating to product/device listing, recordkeeping, periodic reporting, product sampling and distribution, advertising and promotion and reporting of adverse experiences with the product.

In addition, drug manufacturers and other entities involved in the manufacture and distribution of approved drugs are required to register their establishments with the FDA and state agencies, and are subject to periodic unannounced inspections by the FDA and these state agencies for compliance with cGMP requirements. Changes to the manufacturing process are strictly regulated and generally require prior FDA approval before being implemented. FDA regulations also require investigation and correction of any deviations from cGMP and impose reporting and documentation requirements upon us and any third-party manufacturers that we may decide to use. Accordingly, manufacturers must continue to expend time, money, and effort in the area of production and quality control to maintain cGMP compliance.

Once an approval is granted, the FDA may withdraw the approval if compliance with regulatory requirements and standards is not maintained or if problems occur after the product reaches the market. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with

manufacturing processes, or failure to comply with regulatory requirements, may result in, among other things:

- restrictions on the marketing or manufacturing of the product, complete withdrawal of the product from the market or product recalls;
- fines, warning letters or holds on post-approval clinical trials;
- refusal of the FDA to approve pending applications or supplements to approved applications, or suspension or revocation of product license approvals;
- product seizure or detention, or refusal to permit the import or export of products; or
- injunctions or the imposition of civil or criminal penalties.

The FDA strictly regulates marketing, labeling, advertising and promotion of products that are placed on the market. While physicians may prescribe for off label uses, manufacturers may only promote for the approved indications and in accordance with the provisions of the approved label. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off label uses, and a company that is found to have improperly promoted off label uses may be subject to significant liability, both at the federal and state levels.

The FDA has authority to require a Risk Evaluation and Mitigation Strategy, or REMS, from manufacturers to ensure that the benefits of a drug or biological product outweigh its risks. In determining whether a REMS is necessary, FDA must consider the size of the population likely to use the drug, the seriousness of the disease or condition to be treated, the expected benefit of the drug, the duration of treatment, the seriousness of known or potential adverse events, and whether the drug is a new molecular entity. If the FDA determines a REMS is necessary, the drug sponsor must agree to the REMS plan at the time of approval. A REMS may be required to include various elements, such as a medication guide or patient package insert, a communication plan to educate health care providers of the drug's risks, limitations on who may prescribe or dispense the drug, or other measures that the FDA deems necessary to assure the safe use of the drug. In addition, the REMS must include a timetable to assess the strategy at 18 months, three years, and seven years after the strategy's approval. The FDA may also impose a REMS requirement on a drug already on the market if the FDA determines, based on new safety information, that a REMS is necessary to ensure that the drug's benefits outweigh its risks.

Orphan Drug Designation

Under the Orphan Drug Act, the FDA may grant orphan drug designation to a drug intended to treat a rare disease or condition which is defined as one affecting fewer than 200,000 individuals in the United States or more than 200,000 individuals where there is no reasonable expectation that the product development cost will be recovered from product sales in the United States. Orphan drug designation must be requested before submitting an NDA and does not convey any advantage in, or shorten the duration of, the regulatory review and approval process.

If an orphan drug-designated product subsequently receives the first FDA approval for the disease for which it was designed, the product will be entitled to seven years of product exclusivity, which means that the FDA may not approve any other applications to market the same drug for the same indication, except in very limited circumstances, for seven years. If a competitor obtains approval of the same drug, as defined by the FDA, or if our product candidate is determined to be contained within the competitor's product for the same indication or disease, the competitor's exclusivity could block the approval of our product candidate in the designated orphan indication for seven years.

Patent Term Restoration and Marketing Exclusivity

Depending upon the timing, duration and specifics of FDA approval of the use of our therapeutic candidates, some of our U.S. patents may be eligible for limited patent term extension under the Drug Price Competition and Patent Term Restoration Act of 1984, referred to as the Hatch-Waxman Act. The Hatch-Waxman Act permits a patent restoration term of up to five years as compensation for patent term lost during product development and the FDA regulatory review process. However, patent term restoration cannot extend the remaining term of a patent beyond a total of 14 years from the product's approval date. The patent term restoration period is generally one-half the time between the effective date of an IND, and the submission date of an NDA, plus the time between the submission date of an NDA and the approval of that application. Only one patent applicable to an approved drug is eligible for the extension and the application for extension must be made prior to expiration of the patent. The United States

Patent and Trademark Office, in consultation with the FDA, reviews and approves the application for any patent term extension or restoration. In the future, we intend to apply for restorations of patent term for some of our currently owned or licensed patents to add patent life beyond their current expiration date, depending on the expected length of clinical trials and other factors involved in the submission of the relevant NDA.

Market exclusivity provisions under the FDCA also can delay the submission or the approval of certain applications. The FDCA provides a five-year period of non-patent marketing exclusivity within the United States to the first applicant to gain approval of an NDA for a new chemical entity. A drug is a new chemical entity if the FDA has not previously approved any other new drug containing the same active moiety, which is the molecule or ion responsible for the action of the drug substance. During the exclusivity period, the FDA may not accept for review an abbreviated new drug application, or ANDA, or a 505(b)(2) NDA submitted by another company for another version of such drug where the applicant does not own or have a legal right of reference to all the data required for approval. However, an application may be submitted after four years if it contains a certification of patent invalidity or non-infringement. The FDCA also provides three years of marketing exclusivity for an NDA, 505(b)(2) NDA or supplement to an approved NDA if new clinical investigations, other than bioavailability studies, that were conducted or sponsored by the applicant are deemed by the FDA to be essential to the approval of the application, for example, for new indications, dosages or strengths of an existing drug. This three-year exclusivity covers only the conditions associated with the new clinical investigations and does not prohibit the FDA from approving ANDAs for drugs containing the original active agent. Five-year and three-year exclusivity will not delay the submission or approval of a full NDA; however, an applicant submitting a full NDA would be required to conduct or obtain a right of reference to all of the preclinical studies and adequate and well-controlled clinical trials necessary to demonstrate safety and effectiveness.

Other Healthcare Laws

Although we currently do not have any products on the market, we may be subject to additional healthcare regulation and enforcement by the federal government and by authorities in the states and other countries in which we conduct our business. Such laws include, without limitation, state and federal anti-kickback, fraud and abuse, false claims, privacy and security and physician sunshine laws and regulations, many of which may become more applicable to us if our product candidates are approved and we begin commercialization. If our operations are found to be in violation of any of such laws or any other governmental regulations that apply to us, we may be subject to penalties, including, without limitation, administrative, civil and criminal penalties, damages, fines, disgorgement, the curtailment or restructuring of our operations, exclusion from participation in federal and state healthcare programs and imprisonment, any of which could adversely affect our ability to operate our business and our financial results.

Healthcare Reform

The Patient Protection and Affordable Care Act, or PPACA, has had, and is expected to continue to have, a significant impact on the healthcare industry in the United States. PPACA was designed to expand coverage for the uninsured while at the same time containing overall healthcare costs. With regard to pharmaceutical products, among other things, PPACA expanded and increased industry rebates for drugs covered under Medicaid programs and made changes to the coverage requirements under the Medicare prescription drug benefit. We continue to evaluate the effect that PPACA has on our business. In the coming years, additional legislative and regulatory changes could be made to governmental health programs that could significantly impact pharmaceutical companies and the success of our product candidates. PPACA, as well as other federal, state and foreign healthcare reform measures that have been and may be adopted in the future, could harm our future revenues.

Pharmaceutical Coverage, Pricing, and Reimbursement

Sales of our products, when and if approved for marketing, will depend, in part, on the extent to which our products will be covered by third-party payors, such as federal, state, and foreign government health care programs, commercial insurance and managed healthcare organizations. These third-party payors are increasingly reducing reimbursements for medical products, drugs and services. In addition, the U.S. government, state legislatures and foreign governments have continued implementing cost containment programs, including price controls, restrictions on coverage and reimbursement and requirements for substitution of generic products. Adoption of price controls and cost containment measures, and adoption of more restrictive policies in jurisdictions with existing controls and measures, could further limit our net revenue and results. Limited third-party reimbursement for our product candidates or a decision by a third-party payor not to cover our product candidates could reduce physician usage of

our products once approved and have a material adverse effect on our sales, results of operations and financial condition.

Manufacturing Requirements

We and our third-party manufacturers must comply with applicable FDA regulations relating to FDA's cGMP regulations and, if applicable, quality system regulation requirements for medical devices. The cGMP regulations include requirements relating to, among other things, organization of personnel, buildings and facilities, equipment, control of components and drug product containers and closures, production and process controls, packaging and labeling controls, holding and distribution, laboratory controls, records and reports, and returned or salvaged products. The manufacturing facilities for our products must meet cGMP requirements to the satisfaction of the FDA pursuant to a pre-approval inspection before we can use them to manufacture our products. We and our third-party manufacturers are also subject to periodic unannounced inspections of facilities by the FDA and other authorities, including procedures and operations used in the testing and manufacture of our products to assess our compliance with applicable regulations. Failure to comply with statutory and regulatory requirements subjects a manufacturer to possible legal or regulatory action, including, among other things, warning letters, voluntary corrective action, the seizure of products, injunctions, consent decrees placing significant restrictions on or suspending manufacturing operations and civil and criminal penalties.

Other Regulatory Requirements

We are also subject to various laws and regulations regarding laboratory practices, the experimental use of animals, and the use and disposal of hazardous or potentially hazardous substances in connection with our research. In each of these areas, as above, the FDA has broad regulatory and enforcement powers, including, among other things, the ability to levy fines and civil penalties, suspend or delay issuance of approvals, seize or recall products, and withdraw approvals, any one or more of which could have an adverse effect on our ability to operate our business and generate revenues. Compliance with applicable environmental laws and regulations is expensive, and current or future environmental regulations may impair our research, development and production efforts, which could harm our business, operating results and financial condition.

Employees

As of June 30, 2015, we employed 28 full-time employees. A significant number of our management and professional employees have had prior experience with pharmaceutical, biotechnology or medical product companies. Management considers relations with our employees to be good.

Facilities

We maintain our corporate offices in Cambridge, Massachusetts, where we occupy approximately 30,900 square feet of office space under a lease that expires in March 2023, and research and development facilities in Okinawa, Japan and Cambridge, Massachusetts.

Legal Proceedings

We may be involved in various legal proceedings, claims, investigations and other legal matters which arise in the ordinary course of business. Although it is not possible to predict the outcome of these matters, we believe that the ultimate outcome of our pending legal proceedings, individually and in the aggregate, will not have a material adverse effect on our business, financial condition or results of operations.

GLOSSARY OF SCIENTIFIC TERMS

AcRIIb refers to RNA transcribed from the gene encoding Activin Receptor type IIb.

Allele is one of two or more versions of a gene.

Allele-specific refers to the preferential interaction of an oligonucleotide with target RNA transcribed from one version of a gene.

Antisense refers to a technology that utilizes DNA oligonucleotides designed to hybridize with a specific sequence in a target RNA. The DNA/RNA duplex formed by such hybridization is recognized by a cellular enzyme called RNase H, which then cleaves the target RNA. Typically, therapeutic antisense oligonucleotides are designed to bind to a target RNA that encodes a disease-associated protein; cleavage of such RNA triggers its degradation and prevents the protein from being made.

Chiral center is an atom that is bonded to a defined set of pendant groups arranged in three-dimensional space in a way that is not superimposable on its mirror image.

C3a levels refers to the amount of protein C3a formed by the cleavage of complement component 3 (C3) upon activation of the complement system. The amount of C3a is directly proportionate to the amount of activation.

Enzyme-Linked Immunosorbent Assay, or **ELISA**, is a technique used to determine the amount of a specific protein present in a biological sample. ELISA requires an antibody that is specific to the protein of interest, which is linked to an enzyme whose activity can be used to quantify the amount of protein present.

Exon skipping refers to a technology that utilizes therapeutic oligonucleotides designed to hybridize with particular sequences within a target RNA. Typically, the target RNA includes some disease-associated defect, and hybridization of the therapeutic exon-skipping oligonucleotide directs cellular machinery to splice the defect out of the RNA. Often, the target RNA is a protein-coding RNA and the defect is one that, for example, includes a “stop” instruction, so that, absent the therapeutic oligonucleotide, a truncated and defective protein is produced. Use of the exon-skipping oligonucleotide permits the cellular machinery to skip over the “stop” instruction and assemble an at least partially functional protein, thereby mitigating or alleviating the disease or disorder that would otherwise result from the defect.

Exon 51 is a region with the RNA transcribed from the *dystrophin* gene. Certain exon skipping oligonucleotides target sequences within exon 51.

GalNAc refers to N-Acetylgalactosamine, which is a sugar derivative of galactose.

HTT SNP-1 refers to RNA transcribed from the *huntingtin* gene (HTT) containing a Single-Nucleotide-Polymorphism (SNP) at site designated number 1.

HTT SNP-2 refers to RNA transcribed from the *huntingtin* gene (HTT) containing a Single-Nucleotide-Polymorphism (SNP) at site designated number 2.

HTT SNP-3 refers to RNA transcribed from the *huntingtin* gene (HTT) containing a Single-Nucleotide-Polymorphism (SNP) at site designated number 3.

KRT14 SNP-1 refers to RNA transcribed from the *keratin-14* gene (KRT14) containing a Single-Nucleotide-Polymorphism (SNP) at site designated number 1.

KRT14 SNP-2 refers to RNA transcribed from the *keratin-14* gene (KRT14) containing a Single-Nucleotide-Polymorphism (SNP) at site designated number 2.

Oligonucleotide stereochemistry refers to a particular three-dimensional orientation or arrangement of atoms within an oligonucleotide.

Ribonucleic acid interference, or **RNAi**, refers to a technology that utilizes therapeutic oligonucleotides designed to hybridize to a specific sequence in a target RNA in a manner that causes it to be recognized and cleaved by an enzyme known as Argonaut, or Ago2. Typically, therapeutic RNAi oligonucleotides are designed to bind to a target RNA that encodes a disease-associated protein; cleavage of such RNA triggers its degradation and prevents the protein from being made.

Single nucleotide polymorphisms, or **SNPs**, are the most common type of genetic variation among humans. Each SNP represents a difference in a single nucleotide.

SMAD7 refers to RNA transcribed from the SMAD7 gene.

Splice-correction involves designing an oligonucleotide to target an aberrant cellular RNA, so that splicing machinery within the cell is directed to remove aberrant sequences from the RNA. Often, the target RNA is a protein-coding RNA and splice-correction results in production of a shortened protein that nonetheless retains much of the activity of the wild-type protein and, moreover, represents a significant improvement relative to that encoded by the aberrant RNA.

Stereochemistry technology refers to compositions, methods, reagents, processes and designs relating to oligonucleotides which have defined stereochemistry.

Stereoisomer mixtures are compositions containing oligonucleotides that have the same molecular formula and sequence of bonded atoms, but that differ in the three-dimensional orientations of their atoms in space. Conventional synthesis technologies for PS-modified oligonucleotides necessarily generate stereoisomer mixtures.

Stereopure nucleic acid therapeutics refers to compositions in which the oligonucleotides in a given therapeutic possess the same stereochemical pattern.

MANAGEMENT

The following table sets forth information regarding our executive officers and directors as of June 30, 2015.

Name	Age	Position/Title
Executive Officers		
Paul B. Bolno, M.D.	41	President, Chief Executive Officer and Director
Christopher Francis, Ph.D.	37	Vice President of Business Development
Roberto Guerciolini, M.D.	61	Senior Vice President, Head of Early Development
Kyle Moran	44	Vice President, Head of Finance
Chandra Vargeese, Ph.D.	54	Senior Vice President, Head of Drug Discovery
Non-Employee Directors		
Gregory L. Verdine, Ph.D.	56	Chairman of the Board of Directors
Peter Kolchinsky, Ph.D.	38	Director
Koji Miura	66	Director
Ken Takanashi	51	Director
Masaharu Tanaka	62	Director
Takeshi Wada, Ph.D.	53	Director

Executive Officers

Paul B. Bolno, M.D. has served as our President and Chief Executive Officer and as a director since December 2013. Prior to joining us, he served at GlaxoSmithKline from 2009 to 2013 in various roles, including Vice President, Worldwide Business Development – Head of Asia BD and Investments, Head of Global Neuroscience BD, a director of Glaxo Welcome Manufacturing, Pte. Ltd. in Singapore and Vice President, Business Development for the Oncology Business Unit, where he helped establish GlaxoSmithKline's global oncology business and served as a member of the Oncology Executive Team, Oncology Commercial Board and Cancer Research Executive Team. Prior to GlaxoSmithKline, he served as director of Research at Two River LLC, a health care private equity firm from 2004 to 2009. Dr. Bolno earned a medical degree from MCP-Hahnemann School of Medicine and an M.B.A. from Drexel University. He was a general surgery resident and cardiothoracic surgery postdoctoral research fellow at Drexel University College of Medicine. We believe that Dr. Bolno's experience serving as our President and Chief Executive Officer and a member of our board of directors and his experience leading biopharmaceutical companies qualify him to serve on our board of directors.

Christopher Francis, Ph.D. has served as our Vice President, Head of Business Development since April 2014. Prior to joining us, Dr. Francis held senior operational, strategic and business development roles within GlaxoSmithKline Oncology from 2009 to 2014 and was a member of the team that established GlaxoSmithKline's Rare Disease Unit. Before GlaxoSmithKline, Dr. Francis was a health care private equity associate at Two River LLC from 2008 to 2009. He began his career in pharmaceutical pricing and reimbursement consulting at IMS Health. Dr. Francis earned undergraduate and graduate degrees in biochemistry and molecular biology from the University of Melbourne and was a doctoral research associate at the University of Cambridge.

Roberto Guerciolini, M.D. has served as our Senior Vice President, Head of Early Development since March 2015. Dr. Guerciolini was Vice President, Emerging Business Unit at Shire AG from 2011 to 2014. He was Senior Vice President of Pharmaceutical Development at Dicerna Pharmaceuticals, Inc., a company he co-founded, from 2007 to 2011. From 2004 to 2007 he served as Chief Medical Officer of Sirna Therapeutics, which was acquired by Merck & Co. in 2006. Dr. Guerciolini also previously served as Senior Director of Experimental Medicine at Millennium Pharmaceuticals, as well as in clinical development roles at Hoffmann-La Roche and Schering-Plough Inc. Dr. Guerciolini received his medical degree and board certification in Internal Medicine from the University of Perugia Medical School in Italy. He completed a postdoctoral fellowship in Clinical Pharmacology at the Mayo Clinic and is certified by the American Board of Clinical Pharmacology. Dr. Guerciolini additionally earned an executive M.B.A. from the Haas School of Business, University of California, Berkeley.

Kyle Moran has served as our Vice President, Head of Finance since July 2014. Prior to joining us, Mr. Moran served as Chief Financial Officer and Chief Operating Officer of Veroha, Inc., an information assurance software company focused on electronic notary solutions, from 2010 to 2014. He was also a founding partner of Context Financial Services, LLC, a boutique consulting firm that provided interim CFO-services to start-up and middle market companies undergoing rapid expansion or needing expert financial counsel and worked there from 2006 to 2014. In addition, Mr. Moran held senior operational and financial roles at leading global financial services firms, including Zurich Scudder Investments, JPMorgan Chase and Putnam Investments. Mr. Moran holds a bachelor's degree in economics from Boston College and attended the Lemberg Master's Program in international economics and finance at Brandeis University. Mr. Moran is a Chartered Financial Analyst.

Chandra Vargeese, Ph.D. has served as our Senior Vice President, Head of Drug Discovery since August 2014. Before joining us, Dr. Vargeese served as Novartis' Executive Director and Head of RNA Chemistry and Delivery, a position she held from 2008 to 2014. Prior to joining Novartis, Dr. Vargeese led siRNA delivery in the RNA Therapeutics division at Merck & Co., where she served as Senior Director and Head of RNA Chemistry and Delivery. Dr. Vargeese joined Merck through its acquisition of Sirna Therapeutics, where she was Vice President of Chemistry. Before Sirna, Dr. Vargeese served as Associate Director of Chemistry at NeXstar Pharmaceuticals and is the co-inventor of Macugen (pegaptanib), an approved therapy for treating wet AMD. Dr. Vargeese earned a Ph.D. in Organic Chemistry at the Indian Institute of Science, Bangalore, India and completed post-doctoral work at the University of Rhode Island.

Non-Employee Directors

Gregory L. Verdine, Ph.D., one of our founders, has served on the board of directors since our founding in 2012, and has served as Chairman of the board of directors since July 2013. He was our President, Chief Executive Officer and Chief Scientific Officer from our inception through December 2013. Since 1989, he has served as the Erving Professor of Chemistry in the Department of Stem Cell and Regenerative Biology at Harvard University. Dr. Verdine is a director of Gloucester Marine Genomics Institute, which he co-founded in 2013. Since 2011, he has served as the President, Chief Scientific Officer and a co-founder and director of WarpDriveBio. Dr. Verdine founded Enanta Pharmaceuticals and served as a director of the company from 1990 through its successful public offering in 2013. He is a Venture Partner and TRUST Member of Third Rock Ventures, the founder, President and Chief Executive Officer of Verdyne Partners LLC and a Senior Advisor of Shin Nippon Biomedical Laboratories, or SNBL. Dr. Verdine is also the co-founder of Eleven Biotherapeutics, Tokai Therapeutics, Aileron Therapeutics and Gloucester Pharmaceuticals (acquired by Celgene in 2010). He has also served as a director of the Chemical Biology Initiative and the Program in Cancer Chemical Biology at the Dana-Farber Cancer Institute. Dr. Verdine received his Ph.D. in Chemistry from Columbia University and completed postdoctoral work in Molecular Biology at the Massachusetts Institute of Technology and Harvard Medical School. We believe he is qualified to serve on our board of directors because of his expertise and deep knowledge of our company, its technology and our industry and his long track record of creating and advising successful biopharmaceuticals companies.

Peter Kolchinsky, Ph.D. has served on our board of directors since January 2015. Dr. Kolchinsky is a founder, Managing Partner and Portfolio Manager of RA Capital Management, LLC, a crossover fund manager which is dedicated to evidence-based investing in healthcare and life science companies, where he has worked since 2001. RA Capital Management, LLC is the general partner of RA Capital Healthcare Fund, L.P. He serves as a member of the board of directors of Dicerna Pharmaceuticals as well as a number of private companies. Dr. Kolchinsky authored "Entrepreneur's Guide to a Biotech Startup," serves on the board of the American Fertility Association and served on the Board of Global Science and Technology for the National Academics of Sciences from 2009 to 2012. Dr. Kolchinsky earned his Ph.D. in virology from Harvard University and earned his bachelor's degree in Biology from Cornell University. We believe Dr. Kolchinsky is qualified to serve on our board of directors because of his business experience including his experience as a venture capitalist and his experience serving on the boards of various healthcare and life science companies.

Koji Miura has served on our board of directors since October 2012. Mr. Miura is the Managing Director of Miura & Associates Management Consultants Pte. Ltd. Mr. Miura is the Founder and Managing Director of Miura & Associates Management Consultants Pte. Ltd. and serves on the board of directors of Azeus Systems Holdings Ltd., Evolutional Material Pte. Ltd., Marine Tec Tachibana Pte. Ltd., Matsuura Singapore Pte. Ltd., Mercury Investment Holding Pte.

Ltd., Richway Intelligence Trading & Technology Pte. Ltd., Sunmoon Pte. Ltd., Triple Farm Singapore Pte. Ltd. and WithArt Pte. Ltd. Mr. Miura holds a bachelor's degree in Business Administration from the University of Aoyama Gakuin, Tokyo, Japan. We believe he is qualified to serve on our board of directors because of his business experience including his diverse background serving on the board of directors of various companies, both private and publicly-held, across industries.

Ken Takanashi has served on our board of directors since July 2012. Since 2002, Mr. Takanashi has served in various executive management and director roles Shin Nippon Biomedical Laboratories Ltd., or SNBL, and its affiliates and currently serves as its Senior Management Director, Overseas Business Division. Mr. Takanashi was the Chief Financial Officer of SNBL USA, Ltd., a subsidiary of Shin Nippon Biomedical Laboratories, from 2012 to 2014. Mr. Takanashi earned an M.B.A. from the University of Warwick and received his bachelor's degree from the University of Tokyo and is a Chartered Public Accountant. We believe he is qualified to serve on our board of directors because of his extensive experience leading research and development for biopharmaceutical companies and his business, financial and accounting credentials.

Masaharu Tanaka has served on our board of directors since August 2014. Mr. Tanaka is the President of Kagoshima Development Co. Ltd., the general partner of Kagoshima Shinsangyo Sousei Investment Limited Partnership, or KSS. From 2013 to 2014, he was a Managing Director of the Kagoshima Lease Co. Ltd. and from 2007 to 2013, he served as the Auditing Officer of the Kagoshima Bank, Ltd. Mr. Tanaka earned his bachelor's degree in Commercial Science from Seinan Gakuin University. We believe Mr. Tanaka is qualified to serve on our board of directors because of his broad business and financial experience as a venture capitalist and banker.

Takeshi Wada, Ph.D., one of our founders, has served on our board of directors since July 2013. Dr. Wada is a Professor at the Tokyo University of Science. From 1999 to 2014, Dr. Wada was an Associate Professor in the Graduate School of Frontier Sciences at The University of Tokyo and previously was an Assistant Professor in the Department of Life Science at Tokyo Institute of Technology. Dr. Wada earned his Ph.D. from Tokyo Institute of Technology Interdisciplinary Graduate School of Science and Engineering Department of Life Chemistry. He earned his master's degree from the Tokyo Institute of Technology and completed his undergraduate studies at Tokyo University of Science Department of Applied Chemistry. We believe he is qualified to serve on our board of directors because of his extensive experience in biopharmaceuticals research.

Composition of Our Board of Directors

Our board of directors currently consists of seven directors. Pursuant to the terms of a voting agreement that we entered into with our shareholders dated as of August 14, 2015, our shareholders party thereto have agreed to vote their shares to elect the following persons to our board of directors as designated by the following shareholders: (i) RA Capital Healthcare Fund, L.P. has the right to designate one director, and its designee is Dr. Kolchinsky, (ii) Kagoshima Shinsangyo Sousei Investment Limited has the right to designate one director, and its designee is Mr. Tanaka and (iii) the holders of our ordinary shares and our Series B preferred shares have the right to designate three members to our board of directors, and have designated Dr. Verdine, and Messrs. Miura and Wada. Our shareholders have also agreed to elect the person serving as our chief executive officer, who is currently Dr. Bolno, to our board of directors. The voting agreement will be terminated in connection with this offering and there will be no further contractual agreements regarding the election of our directors. The authorized number of directors may be changed from time to time by resolution of our board of directors. Vacancies on our board of directors can be filled by resolution of our board of directors. Upon completion of this offering, any additional directorships resulting from an increase in the number of directors may only be filled by the directors then in office unless otherwise required by law or by a resolution passed by our board of directors. The term of office for each director will be until his or her successor is elected at our annual general meeting of shareholders or his or her death, resignation or removal, whichever is earliest to occur. Singapore law requires that at least one of our directors be resident in Singapore. Mr. Miura is our resident Singapore director.

Director Independence

In connection with this offering, we have applied to list our ordinary shares on the NASDAQ Global Market. Under the rules of the NASDAQ Stock Market, our board of directors must be comprised of a majority of independent directors within a specified period of the completion of this offering. In addition, the rules of the NASDAQ Stock

Market require that, subject to specified exceptions, each member of our audit, compensation and nominating and corporate governance committees must be independent. Under the NASDAQ Stock Market rules, a director will only qualify as an "independent director" if, in the opinion of our board of directors, that person does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. Additionally, compensation committee members must not have a relationship with us that is material to the director's ability to be independent from management in connection with the duties of a compensation committee member.

Audit committee members must also satisfy the independence criteria set forth in Rule 10A-3 under the Securities Exchange Act of 1934, as amended, or the Exchange Act. In order to be considered independent for purposes of Rule 10A-3, members of our audit committee may not, other than in their capacity as members of the audit committee, the board of directors or any other board committee: (i) accept, directly or indirectly, any consulting, advisory or other compensatory fee from us or any of our subsidiaries; or (ii) be an affiliate of us or any of our subsidiaries. We intend to satisfy the audit committee independence requirements of Rule 10A-3 as of the completion of this offering.

Our board of directors has undertaken a review of the independence of each director and considered whether each director has a material relationship with us that could compromise his or her ability to exercise independent judgment in carrying out his or her responsibilities. As a result of this review, our board of directors determined that Drs. Kolchinsky and Wada and Messrs. Miura, Takanashi and Tanaka, representing five of our seven directors, are "independent directors" as defined under the applicable rules and regulations of the SEC and the listing requirements and rules of the NASDAQ Stock Market.

Committees of our Board of Directors

Upon the completion of this offering, the standing committees of our board of directors will be an Audit Committee, a Compensation Committee and a Nominating and Corporate Governance Committee. Each of the committees will report to our board of directors as they deem appropriate and as our board of directors may request. The expected composition, duties and responsibilities of these committees are set forth below.

Audit Committee

The Audit Committee will be responsible for, among other matters: (i) oversight and review of our financial statements and financial reporting processes; (ii) our systems of internal accounting and financial controls and disclosure controls; (iii) the qualifications and independence of our independent auditors; (iv) the performance of our internal audit function and independent auditors; and (v) compliance with legal and regulatory requirements and codes of conduct and ethics programs established by management and our board of directors.

Immediately following this offering, the Audit Committee will consist of , and and will be chaired by . We believe that each of them will qualify as independent directors according to the rules and regulations of the SEC and the NASDAQ Global Market with respect to audit committee membership.

We also believe that qualifies as an "audit committee financial expert," as such term is defined in Item 401(h) of Regulation S-K. Our board of directors will adopt a written charter for the Audit Committee in connection with this offering that satisfies the applicable rules of the SEC and the listing standards of the NASDAQ Stock Market.

Compensation Committee

The Compensation Committee will be responsible for, among other matters: (i) reviewing and approving all compensation, including incentive compensation and corporate and individual goals and objectives relevant to our chief executive officer and evaluating our chief executive officer's performance in light of those goals and objectives; (ii) reviewing and approving the base salaries, incentive compensation and equity-based compensation of our other executive officers; (iii) approving all significant compensation or incentive plans for executives, including material changes to all such plans; and (iv) having the sole authority to retain or obtain the advice of any compensation consultant, independent legal counsel or other adviser after taking into account certain factors which address the independence of that consultant, counsel or adviser.

Immediately following the completion of this offering, the members of our Compensation Committee will be , and and will be chaired by . Our board of directors will adopt a written charter for the Compensation Committee in connection with this offering that satisfies the applicable rules of the SEC and the listing standards of the NASDAQ Stock Market.

Nominating and Corporate Governance Committee

The Nominating and Corporate Governance Committee will be responsible for, among other matters: (i) assisting our board of directors by identifying individuals qualified to become members of our board; (ii) recommending to our board the director nominees to be recommended to shareholders for appointment at each annual general meeting of shareholders or in connection with filling vacancies on our board; (iii) recommending to our board our corporate governance guidelines to be adopted; and (iv) leading our board in its annual review of the performance of our directors.

Immediately following this offering, the Nominating and Corporate Governance Committee will consist of , and and will be chaired by . Our board of directors will adopt a written charter for the Nominating and Corporate Governance Committee in connection with this offering that satisfies the applicable rules of the SEC and the listing standards of the NASDAQ Stock Market.

Compensation Committee Interlocks and Insider Participation

No officer or employee has served as a member of our Compensation Committee. None of our executive officers serve as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving on our board of directors or Compensation Committee.

Risk Oversight

Our board of directors will oversee the risk management activities designed and implemented by our management. Our board of directors will execute its oversight responsibility for risk management both directly and through its committees. The full board of directors will also consider specific risk topics, including risks associated with our strategic plan, business operations and capital structure. In addition, our board of directors will receive detailed regular reports from members of our senior management and other personnel that include assessments and potential mitigation of the risks and exposures involved with their respective areas of responsibility.

Our board of directors will delegate to the Audit Committee oversight of our risk management process. Our other board committees will also consider and address risk as they perform their respective committee responsibilities. All committees will report to the full board of directors as appropriate, including when a matter rises to the level of a material or enterprise level risk.

Family Relationships

There are no family relationships between any of our executive officers and directors.

Code of Business Conduct

We expect our board of directors to adopt a code of business conduct in connection with the completion of this offering. The code of business conduct will apply to all of our employees, officers and directors. We also expect our board of directors to adopt a supplemental code of conduct applicable to senior financial employees. The full text of our codes of business conduct will be posted on our website at www.wavelifesciences.com. If we make any substantive amendments to these codes or grant any waiver from a provision to our chief executive officer, principal financial officer or principal accounting officer, we will disclose the nature of such amendment or waiver on our website or in a report on Form 8-K. The information contained on our website is not part of this prospectus.

EXECUTIVE AND DIRECTOR COMPENSATION

2014 Summary Compensation Table

The following table presents summary information regarding the total compensation earned by our principal executive officer and our two most highly compensated executive officers, other than our principal executive officer, for the year ended December 31, 2014. We refer to these individuals collectively as our named executive officers.

Name and Principal Position	Year	Salary ($)	Non-Equity Incentive Plan Compensation ($) (1)	All Other Compensation ($) (2)	Total ($)
Paul B. Bolno, M.D. *President and Chief Executive Officer*	2014	450,000	112,500	71	562,571
Christopher Francis, Ph.D. *Vice President of Business Development*	2014	131,042 (3)	29,671	50	160,763
Chandra Vargeese, Ph.D. *Senior Vice President, Head of Drug Discovery*	2014	118,750 (4)	32,945	29	151,724

(1) Pursuant to the terms of the named executive officer's employment agreement or offer letter, each named executive officer is eligible to receive an annual bonus award of up to 25% of the executive officer's annual base salary, subject to the achievement of annual performance milestones as determined by our board of directors in its sole discretion. Our 2014 goals related to the advancement of biological proof of concept, scalable chemical process and our intellectual property portfolio.
(2) Amount reflects the value of annual premiums paid by us with respect to a life insurance policy for the benefit of the named executive officer.
(3) Amount reflects the prorated amount of Dr. Francis's annual salary of $185,000. Dr. Francis joined us in April 2014.
(4) Amount reflects the prorated amount of Dr. Vargeese's annual salary of $285,000. Dr. Vargeese joined us in August 2014.

Outstanding Equity Awards at December 31, 2014

None of our named executive officers held equity awards at December 31, 2014.

2015 Equity Awards

In March 2015, under the 2014 Equity Incentive Plan, our board of directors approved a share issuance to Dr. Bolno of 47,223 ordinary shares, which were fully vested on their date of grant, and approved the following grants of incentive share options to each of the named executive officers:

Name	Grant Amount	Exercise Price
Paul B. Bolno, M.D.	134,607 (1)	$ 10.00
Christopher Francis, Ph.D.	36,366 (2)	10.00
Chandra Vargeese, Ph.D.	54,549 (3)	10.00

(1) The shares underlying the option vest in equal monthly installments over 36 months, commencing on December 12, 2014, subject to such officer's continued service with us on each such vesting date. All shares underlying these options will become fully vested upon a change of control, as defined in each option grant.
(2) 25% of the shares underlying the option vested on April 15, 2014 and the remainder vest in equal monthly installments over 36 months, subject to such officer's continued service with us on each such vesting date. All shares underlying these options will become fully vested upon a change of control, as defined in each option grant.
(3) 25% of the shares underlying the option vested on August 1, 2014 and the remainder vest in equal monthly installments over 36 months, subject to such officer's continued service with us on each such vesting date. All shares underlying these options will become fully vested upon a change of control, as defined in each option grant.

Employment Agreements

Paul Bolno, M.D. In December 2013, we entered into an employment agreement with Dr. Bolno pursuant to which he serves as our President and Chief Executive Officer. Pursuant to this agreement, Dr. Bolno's current annual base salary is $450,000 and he has the opportunity to earn an annual performance bonus of up to 25% of his annual base salary, subject to the achievement of annual performance milestones defined by our board of directors in its sole discretion.

Dr. Bolno is also entitled to certain benefits in connection with a termination of his employment or a change of control, which are discussed below under "—Potential Payments upon Termination or Change of Control."

Christopher Francis, Ph.D. In March 2014, we entered into an offer letter agreement with Dr. Francis pursuant to which he serves as our Vice President, Business Development. In accordance with the terms of this agreement, Dr. Francis's initial annual base salary is $185,000 and he has the opportunity to earn an annual performance bonus of up to 25% of his annual base salary, subject to the achievement of annual performance milestones defined by our board of directors in its sole discretion. In connection with this agreement, Dr. Francis was granted an option to purchase 36,366 of our ordinary shares in March 2015.

Chandra Vargeese, Ph.D. In July 2014, we entered into an offer letter agreement with Dr. Vargeese pursuant to which she serves as our Senior Vice President, Head of Drug Discovery. In accordance with the terms of this agreement, Dr. Vargeese's initial annual base salary is $285,000 and she has the opportunity to earn an annual performance bonus of up to 25% of her annual base salary, subject to on the achievement of annual performance milestones defined by our board of directors in its sole discretion. In connection with this agreement, Dr. Vargeese was granted an option to purchase 54,549 of our ordinary shares in March 2015 and received a signing bonus of $15,000 in August 2015.

As a condition of their employment, each of our named executive officers has entered into a non-competition and non-solicitation agreement pursuant to which he or she has agreed not to compete with us for a period of 12 months after the termination of his or her employment. All agreements generally provide for at-will employment and that our named executive officers are eligible to participate in employee benefit plans maintained from time to time by us of general applicability to other senior executives.

Retirement Benefits

We participate in the national pension schemes as defined by the laws of the countries in which we operate. As part of our overall compensation program, we provide all full-time U.S.-based employees, including our named executive officers, with the opportunity to participate in a defined contribution 401(k) plan. Our 401(k) plan is intended to qualify under Section 401 of the Internal Revenue Code so that employee contributions and income earned on such contributions are not taxable to employees until withdrawn. Employees may elect to defer up to up to the statutorily prescribed annual limit of their eligible compensation in the form of elective deferral contributions to our 401(k) plan. We have a J401k defined contribution pension plan covering all Japan-based permanent employees. The J401k defined contribution pension plan allows us to make pre-tax contributions up to the maximum allowable amount set by the chief officer of Kyushu Regional Bureau of Health and Welfare and applicable wage regulations.

Potential Payments Upon Termination or Change in Control

Pursuant to the employment agreement that we entered into with Dr. Bolno, in the event that Dr. Bolno ceases to be employed by, or terminates his employment with us, then all unvested rights to acquire our shares which are held by him will be forfeited and will automatically be transferred and reacquired by us at no cost. In addition, pursuant to the applicable option agreements with each of Drs. Bolno, Francis and Vargeese, all unvested shares underlying outstanding options will become fully vested upon a change of control, as defined in each such option agreement. See "—2015 Equity Awards" described above.

Additionally, if we terminate Dr. Bolno's employment without cause (but not including termination due to his death or disability), then he will be entitled to receive as of the date of termination: (i) any earned but unpaid base salary, (ii) reimbursement for all reasonable and necessary expenses incurred by him in connection with the performance of services on our behalf and (iii) continued payment of his base salary for 12 months. If however we terminate Dr. Bolno's employment for cause, or upon his voluntary resignation, in either case, subject to his execution and delivery of a full and unconditional general release of claims in our favor which becomes effective no later than 60 days following his termination, or upon his death or disability, he will be entitled to receive as of the date of termination: (i) any earned but unpaid base salary and (ii) reimbursement for all reasonable and necessary expenses incurred by him in connection with the performance of services. The definitions of "cause" and "disability" are defined in Dr. Bolno's employment agreement.

Equity Incentive Plan

2014 Plan

In December 2014, our board adopted our 2014 Equity Incentive Plan, or the 2014 Plan, and reserved 436,391 ordinary shares for issuance under the 2014 Plan. The 2014 Plan was approved by our shareholders in January 2015. In March 2015, our board and shareholders amended the plan to increase the number of ordinary shares issuable under the 2014 Plan to 618,221 ordinary shares and on August 14, 2015, our board and shareholders further amended the plan to increase the number of ordinary shares issuable under the 2014 Plan to 879,800 shares.

As of October 9, 2015, 498,499 ordinary shares were issuable upon the exercise of outstanding options under the 2014 Plan and 334,078 shares were available for issuance under the 2014 Plan.

Types of Awards. The 2014 Plan provides for the granting of incentive share options, non-qualified share options, or NQSOs, share appreciation rights and restricted awards.

- *Incentive and Nonqualified Share Options*. The plan administrator determines the exercise price of each share option. The exercise price of an NQSO may not be less than the fair market value of our ordinary shares on the date of grant. The exercise price of an incentive share option may not be less than the fair market value of our ordinary shares on the date of grant if the recipient holds 10% or less of the combined voting power of our securities, or 110% of the fair market value of a share of our ordinary shares on the date of grant otherwise.
- *Share Grants*. The plan administrator may grant or sell shares, including restricted shares. The share grant will be subject to the conditions and restrictions determined by the administrator. The recipient of a share grant shall have the rights of a shareholder with respect to the ordinary shares issued to the holder under the 2014 Plan.
- *Share-Based Awards*. The administrator of the 2014 Plan may grant other share-based awards, including share appreciation rights and RSUs, with terms approved by the administrator, including restrictions related to the awards. The holder of a share-based award shall not have the rights of a shareholder until shares of our share capital are issued pursuant to such award.

Plan Administration. Our board is the administrator of the 2014 Plan, except to the extent it delegates its authority to a committee, in which case the committee shall be the administrator. Our board expects to delegate this authority to our compensation committee following the completion of this offering. The administrator has the authority to determine the terms of awards, including exercise and purchase price, the number of shares subject to awards, the value of our ordinary shares, the vesting schedule applicable to awards, the form of consideration, if any, payable upon exercise or settlement of an award and the terms of award agreements for use under the 2014 Plan.

Eligibility. Our board will determine the participants in the 2014 Plan from among our employees, directors and consultants. A grant may be approved in advance with the effectiveness of the grant contingent and effective upon such person's commencement of service within a specified period.

Termination of Service. Unless otherwise provided by our board or in an award agreement, upon a termination of a participant's service, all unvested options then held by the participant will terminate and all other unvested awards will be forfeited.

Transferability. Awards of incentive share options under the 2014 Plan may not be transferred except by will or by the laws of descent and distribution and shall only be exercisable during the lifetime of the option holder by the option holder. Awards of NQSOs may be transferred to a permitted transferee upon the written approval of the administrator to the extent provided in the award agreement or by will or by the laws of descent and distribution and shall only be exercisable during the lifetime of the option holder by the option holder.

Adjustment. In the event of a share dividend, split, recapitalization or reorganization or other change in change in capital structure, our board will make appropriate adjustments to the number and kind of shares or securities subject to awards.

Shares Eligible for Reissuance. Any shares subject to an award that is canceled, forfeited or expires prior to exercise or realization, either in full or in part, will again become available for issuance under the 2014 Plan. However, shares subject to an award under the 2014 Plan will not again be made available for issuance or delivery under the 2014 Plan if such shares are (a) shares tendered in payment of an option; (b) shares delivered or withheld by us to satisfy any tax withholding obligation; or (c) shares covered by a share-settled share appreciation right or other awards that were not issued upon the settlement of the award.

Corporate Transaction. If we are acquired, our board of directors (or compensation committee) will with respect to options and share appreciation rights: (i) make appropriate provision for the continuation of the option or share appreciation right by substituting on an equitable basis for the ordinary shares then subject to such option or share appreciation right either the consideration payable with respect to the outstanding ordinary shares in connection with the corporate transaction or securities of any successor or acquiring entity; (ii) cancel or arrange for the cancellation of the options or share appreciation rights, to the extent not vested or exercised prior to the effective time of the transaction, in exchange for a payment in cash or ordinary shares as determined by the board of directors, in an amount equal to the amount by which the then fair market value of the ordinary shares subject to such vested option or share appreciation right exceeds the exercise price; or (iii) after giving holders an opportunity to exercise to the extent vested their outstanding options or share appreciation rights, terminate any or all unexercised options and share appreciation rights at such time as the board deems appropriate. If we are acquired, our board of directors (or compensation committee) with respect to outstanding restricted awards, shall make appropriate provision for the continuation of such restricted awards on the same terms and conditions by substituting on an equitable basis for the ordinary shares then subject to such restricted awards either the consideration payable with respect to the outstanding ordinary shares in connection with the transaction or securities of any successor or acquiring entity. In lieu of the foregoing, if we are acquired, the board of directors may provide that, upon consummation of the acquisition, each outstanding restricted award shall be terminated in exchange for payment of an amount equal to the consideration payable upon consummation of such transaction to a holder of the number of ordinary shares comprising such restricted award to then extent then vested.

Amendment. The 2014 Plan may be amended by our board, except that shareholder approval will be required for any amendment to the 2014 Plan to the extent such approval is required by law, include the Internal Revenue Code.

Amendment of Outstanding Awards. The administrator may amend any term or condition of any outstanding award including, without limitation, to reduce or increase the exercise price or purchase price, accelerate the vesting schedule or extend the expiration date, provided that no such amendment shall impair the rights of a participant without such participant's consent.

Director Compensation

The following table shows the total compensation earned during the year ended December 31, 2014 by each of our non-employee directors except Dr. Kolchinsky, who was not a member of our board of directors in 2014.

Name	Fees earned or paid in cash ($)	Total ($)
Gregory L. Verdine, Ph.D.	150,000 (1)	150,000 (1)
Hidekazu Yonezawa (2)	—	—
Koji Miura	2,223 (3)	2,223 (3)
Ken Takanashi	—	—
Masaharu Tanaka	—	—
Takeshi Wada, Ph.D.	24,505 (4)	24,505 (4)

(1) Amount paid pursuant to a consulting agreement between WAVE USA and Dr. Verdine.
(2) Mr. Yonezawa was elected to our board of directors in April 2014 and resigned in August 2014.
(3) The amount was paid as a fee for serving on our board of directors pursuant to a nominee director fee agreement between the company and Miura & Associates Management Consultants Pte. Ltd. and reflects the converted value of S$3,000 at a conversion rate of 1.34671 Singapore dollars per U.S. dollar on June 30, 2015.
(4) The amount was paid as a fee for the provision of scientific advisory services to WAVE Japan and reflects the converted to U.S. dollar value of ¥3,000,000 at a conversion rate of 122.4222 yen per U.S. dollar on June 30, 2015.

Upon the completion of this offering we intend to compensate each of the non-employee members of our board of directors in accordance with the following annual retainer fees (paid on a quarterly basis):

- Board member annual retainer of $
- Board chair annual additional retainer of $
- Committee chair annual retainer of $
- Committee member annual retainer of $

In addition to cash compensation, the non-employee members of our board will be awarded an annual share option grant in the amount of our ordinary shares.

Limitations on Liability and Indemnification Matters

Our articles of association provide that, subject to the provisions of the Singapore Companies Act in effect from time to time, every director, managing director, secretary or other officer of our company or our subsidiaries and affiliates shall be entitled to be indemnified by our company against all costs, charges, losses, expenses and liabilities incurred by him or her in the execution and discharge of his or her duties or in relation thereto and in particular and without prejudice to the generality of the foregoing, no director, managing director, secretary or other officer of our company or our subsidiaries and affiliates shall be liable for the acts, receipts, neglects or defaults of any other director or officer or for joining in any receipt or other act for conformity or for any loss or expense happening to our company through the insufficiency or deficiency of title to any property acquired by order of the directors for or on behalf of our company or for the insufficiency or deficiency of any security in or upon which any of the moneys of our company shall be invested or for any loss or damage arising from the bankruptcy, insolvency or tortious act of any person with whom any moneys, securities or effects shall be deposited or left or for any other loss, damage or misfortune whatever which shall happen in the execution of the duties of his or her office or in relation thereto unless the same happen through his or her own negligence, default, breach of duty or breach of trust.

We have entered into deeds of indemnity with all directors and our president and chief executive officer. The deeds of indemnity provide, among other things, that we will indemnify such officer or director, under the circumstances and to the extent provided for therein, for expenses, damages, judgments, fines and settlements he may be required to pay in actions or proceedings which he is or may be made a party by reason of his position as a director, officer or other agent of the Company, subject to and to the fullest extent permitted under the Singapore Companies Act, as amended, and our articles of association. We believe that these provisions and agreements are necessary to attract and retain qualified persons as our directors and executive officers. Furthermore, we have obtained director and officer liability insurance to cover liabilities our directors and officers may incur in connection with their services to us.

Rule 10b5-1 Sales Plans

Our directors and executive officers may adopt written plans, known as Rule 10b5-1 plans, in which they will contract with a broker to buy or sell our ordinary shares on a periodic basis. Under a Rule 10b5-1 plan, a broker executes trades pursuant to parameters established by the director or executive officer when entering into the plan, without further direction from them. The director or executive officer may amend a Rule 10b5-1 plan in some circumstances and may terminate a plan any time. Our directors and executive officers also may buy or sell additional shares outside of a Rule 10b5-1 plan when they are not in possession of material nonpublic information subject to compliance with the terms of our insider trading policy. Prior to 180 days after the date of this offering, subject to early termination, the sale of any shares under such plan would be subject to the lock-up agreement that the director or executive officer has entered into with the underwriters.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

The following includes a summary of transactions since January 1, 2012 to which we have been a party, in which the amount involved in the transaction exceeded $120,000, and in which any of our directors, executive officers or beneficial owners of more than 5% of our ordinary shares, on an as converted basis, or any member of the immediate family of any of the foregoing persons had or will have a direct or indirect material interest, other than equity and other compensation, termination, change in control and other arrangements, which are described under “Executive and Director Compensation.” We refer to such transactions as “related party transactions” and such persons as “related parties.” With the approval of our board of directors, we have engaged in the related party transactions described below.

Share Exchange Creating Our Corporate Structure

We were formed as a result of the combination of companies under the common control of Shin Nippon Biomedical Laboratories, Ltd., or SNBL, which prior to this offering beneficially owns approximately 31% of our ordinary shares, on an as-converted basis, and which is affiliated with our director, Ken Takanashi. SNBL held (i) 80% of WAVE USA (formerly Ontorii, Inc.), with the remaining 20% held by Dr. Gregory L. Verdine, our co-founder and a member of our board of directors, and (ii) 90% of WAVE Japan (formerly Chiralgen., Ltd.), with the remaining 10% held by Dr. Takeshi Wada. In July 2012, SNBL formed WAVE Life Sciences Pte. Ltd. for the purpose of combining these two entities. On September 13, 2012, SNBL entered into the following two share exchange transactions resulting in WAVE USA and WAVE Japan becoming wholly-owned subsidiaries of WAVE Life Sciences Pte. Ltd.:

- *Ontorii, Inc. Share Exchange*. We issued 50,000 ordinary shares to Dr. Gregory L. Verdine in exchange for his 750 shares of common stock of Ontorii, Inc. and 200,000 ordinary shares to SNBL in exchange for its 3,000 shares of common stock of Ontorii, Inc.
- *Chiralgen., Ltd. Share Exchange*. We issued 24,900 ordinary shares to Dr. Takeshi Wada in exchange for his 152 ordinary shares of Chiralgen., Ltd. and 225,100 ordinary shares to SNBL in exchange for its 1,374 ordinary shares of Chiralgen., Ltd.

Private Placement of Shares

Issuance of Series B Preferred Shares in August 2015

In August 2015, we issued an aggregate of 1,320,000 Series B preferred shares at a purchase price of $50.00 per share to 19 accredited investors, including the following related parties, each of whom purchased the number of Series B preferred shares indicated below and beneficially owns more than 5% of our outstanding shares.

Name	Series B Preferred Shares
Foresite Capital Fund III, L.P.	330,000
Entities affiliated with FMR LLC (1)	300,000
Entities affiliated with RA Capital Healthcare Fund, L.P. (2)	290,000
Entities affiliated with Shin Nippon Biomedical Laboratories, Ltd. (3)	40,000
Kagoshima Shinsangyo Sousei Investment Limited Partnership (4)	40,000

(1) Consists of (a) 243,056 shares purchased by Fidelity Select Portfolios: Biotechnology Portfolio and (b) 56,944 shares purchased by Fidelity Advisor Series VII: Fidelity Biotechnology Fund.

(2) Consists of (a) 240,120 shares purchased by RA Capital Healthcare Fund, L.P., or RA Capital, and (b) 49,880 shares purchased by Blackwell Partners LLC—Series A. RA Capital Management, LLC is the general partner of RA Capital, and the investment adviser for Blackwell Partners LLC—Series A. Dr. Peter Kolchinsky who serves on our board of directors, is a founder, managing partner and portfolio manager of RA Capital Management LLC, the general partner of RA Capital.

(3) Shares purchased by SNBL USA, Ltd., an affiliate of SNBL. Mr. Ken Takanashi, a member of our board of directors, is a director and executive officer of SNBL and its affiliates.

(4) Mr. Masaru Tanaka, a member of our board of directors, is the President of Kagoshima Development Co. Ltd., the general partner of Kagoshima Shinsangyo Sousei Investment Limited Partnership.

Issuance of Ordinary Shares in January 2015

In January 2015, we issued an aggregate of 1,180,000 ordinary shares at a purchase price of $10.00 per share to two accredited investors, both of whom are beneficial owners of more than 5% of our outstanding shares. RA Capital Health Care Fund, L.P., or RA Capital, purchased 1,000,000 ordinary shares in this transaction at an aggregate purchase price of $10.0 million. Dr. Peter Kolchinsky, who serves on our board of directors, is a founder, managing

partner and portfolio manager of RA Capital Management, LLC, the general partner of RA Capital. Kagoshima Shinsangyo Sousei Investment Limited Partnership, or KSS, purchased 180,000 ordinary shares in this transaction at an aggregate purchase price of $1.8 million. Masaharu Tanaka, who serves on our board of directors, is the President of Kagoshima Development Co. Ltd., the general partner of KSS.

Issuance of Ordinary Shares and Series A Preferred Shares in February 2014

In February 2014, we entered into a subscription agreement with KSS pursuant to which we issued 560,000 ordinary shares to KSS at a purchase price of $10.00 per share for a total consideration of $5.6 million. Masaharu Tanaka, who serves on our board of directors, is the President of Kagoshima Development Co. Ltd., the general partner of KSS.

In February 2014, we issued 585,200 Series A preferred shares and 375,000 ordinary shares to SNBL in exchange for the cancellation of certain debt obligations owed by us to SNBL in the amount of $9.6 million. Ken Takanashi, a member of our board of directors, is a director and executive officer of SNBL and its affiliates. The corresponding debt obligations were issued by SNBL in our favor between November 2012 and November 2013 with original principal amounts ranging from $0.3 million to $4.1 million for an aggregate amount of $9.6 million and at the U.S. federal interest rate applicable at the time of each loan's issuance.

Indemnification Agreements with Officers and Directors

We have entered into deeds of indemnity with each of our directors and our president and chief executive officer. These agreements will require us to indemnify these individuals to the fullest extent permitted under Singapore law against liabilities that may arise by reason of their service to us, as a result of any proceeding against them as to which they could be indemnified. These indemnification rights shall not be exclusive of any other right which an indemnified person may have or hereafter acquire under any statute, provision of our articles of association, agreement, vote of shareholders or disinterested directors or otherwise if he or she is subsequently found to have been negligent or otherwise have breached his or her trust or fiduciary duties or to be in default thereof, or where the Singapore courts have declined to grant relief. See "Description of Share Capital—Limitations of Liability and Indemnification Matters."

Registration Rights

The holders of 3,608,123 ordinary shares and the holder of 965,300 Series A preferred shares have entered into an agreement with us that provides certain registration rights to these holders and future transferees of their securities. See "Description of Share Capital—Registration Rights" for a description of these rights. Such holders include the following related parties:

Name	Securities
Entities affiliated with Shin Nippon Biomedical Laboratories, Ltd. (1)	1,425,300
Entities affiliated with RA Capital Healthcare Fund, L.P. (2)	1,290,000
Kagoshima Shinsangyo Sousei Investment Limited Partnership	780,000
Foresite Capital Fund III, L.P.	330,000
Entities affiliated with FMR LLC (3)	300,000
Dr. Gregory L. Verdine	50,000
Dr. Paul Bolno	47,223
Dr. Takeshi Wada	24,900

(1) Consists of (a) 420,000 ordinary shares and 965,300 Series A preferred shares held by SNBL and (b) 40,000 Series B preferred shares held by SNBL USA, Ltd., an affiliate of SNBL.

(2) Consists of (a) 1,000,000 ordinary shares and 240,120 Series B preferred shares held by RA Capital and (b) 49,880 shares held by Blackwell Partners LLC—Series A, an affiliate of RA Capital.

(3) Consists of (a) 243,056 shares purchased by Fidelity Select Portfolios: Biotechnology Portfolio and (b) 56,944 shares purchased by Fidelity Advisor Series VII: Fidelity Biotechnology Fund. These entities are managed by direct or indirect subsidiaries of FMR LLC.

Consulting Agreement with Dr. Gregory L. Verdine

Dr. Gregory L. Verdine entered into a consulting agreement with WAVE USA, dated as of April 1, 2012, pursuant to which Dr. Verdine serves as a scientific advisor. The consulting agreement does not have a certain term and may be

terminated by either party upon 14 days' prior written notice. WAVE USA pays Dr. Verdine $12,500 per month and reimburses him for all reasonable expenses incurred in connection with the provision of these services. We paid Dr. Verdine $112,500, $150,000, $150,000 and $75,000 in 2012, 2013, 2014 and through June 30, 2015, respectively, under this agreement.

Agreement with Dr. Takeshi Wada

We pay Dr. Takeshi Wada ¥250,000 per month, or approximately $2,042 using a conversion rate of 122.4222 yen per U.S. dollar on June 30, 2015, and reimburse him for all reasonable expenses incurred in connection with the provision of scientific advisory services to WAVE Japan. We do not have a formal agreement with Dr. Wada related to the provisions of these services. We paid Dr. Wada $16,116, $19,928, $28,339 and $12,477 in 2012, 2013, 2014 and through June 30, 2015, respectively under this agreement.

Agreements with SNBL

Pursuant to the terms of a commercial lease agreement with SNBL USA, Ltd., an affiliate of SNBL, or SNBL USA, which WAVE USA entered into in January 2010, WAVE USA pays $5,797 per month to SNBL USA for the sublease of office space in Boston, Massachusetts and is obligated to pay $9,029 per month to SNBL USA for 112 months for the cost of improvements to the leased premises. We paid SNBL $213,709 in each of 2012, 2013, 2014 and $106,855 through June 30, 2015, respectively under this lease. Ken Takanashi, a member of our board of directors, is a director and executive officer of SNBL and its affiliates.

Pursuant to the terms of a service agreement we previously held with SNBL, we paid SNBL $98,008, $245,412, $70,942 and $1,094 in 2012, 2013, 2014 and through June 30, 2015, respectively, for accounting and administrative services provided to us and our affiliates.

Voting Agreement

Pursuant to the terms of a voting agreement that we entered into with certain holders of our ordinary shares and preferred shares dated as of August 14, 2015 and which will terminate upon the completion of this offering, such shareholders had the right to designate members for election to our board of directors.

Related Party Transaction Policy

Prior to the consummation of this offering, our board of directors will adopt a written policy, which we refer to as the "related party transaction approval policy," which will require our management to identify proposed related party transactions and present information about the proposed related party transaction to our audit committee, or if audit committee approval would be inappropriate, to another independent body of our board of directors, for review and if deemed appropriate, for approval by the committee. In approving or rejecting such proposed related party transaction, the committee will be required to consider relevant facts and circumstances. The committee will approve only those transactions that, in light of known circumstances, are deemed to be in our best interests. In the event that any member of the committee is not a disinterested person with respect to the related party transaction under review, that member will be excluded from the review and approval or rejection of such related party transaction: provided, however, that such committee member may be counted in determining the presence of a quorum at the meeting, of the committee at which such transaction is considered. If we become aware of an existing related party transaction which has not been approved under the policy, the matter will be referred to the committee. The committee will evaluate all options available, including ratification, revision or termination of such transaction. In the event that management determines that it is impractical or undesirable to wait until a meeting of the committee to consummate a related party transaction, the chair of the committee may approve such transaction in accordance with the related person transaction approval policy. Any such approval must be reported to the committee at the next regularly scheduled meeting.

PRINCIPAL SHAREHOLDERS

The following table sets forth certain information regarding beneficial ownership of our ordinary shares as of August 15, 2015 for

- each beneficial owner of more than 5% of our ordinary shares and Series A preferred shares;
- each named executive officer;
- each director; and
- all of our executive officers and directors as a group.

Each shareholder's ordinary share percentage ownership before this offering is based on 3,602,123 ordinary shares outstanding as of August 15, 2015, after giving effect to the conversion of all outstanding Series B preferred shares into 1,320,000 ordinary shares prior to the closing of this offering. Each shareholder's ordinary share percentage ownership after this offering is based on ordinary shares outstanding immediately after the completion of this offering after giving effect to the conversion of all outstanding Series B preferred shares into 1,320,000 ordinary shares prior to the closing of this and assuming no exercise by the underwriters of their option to purchase additional ordinary shares.

Beneficial ownership for the purposes of the following table is determined in accordance with the rules and regulations of the SEC. These rules generally provide that a person is the beneficial owner of securities if such person has or shares the power to vote or direct the voting thereof, or to dispose or direct the disposition thereof or has the right to acquire such powers within 60 days. Ordinary shares subject to options that are currently exercisable or exercisable within 60 days of August 15, 2015 are deemed to be outstanding and beneficially owned by the person holding the options. These shares, however, are not deemed outstanding for the purposes of computing the percentage ownership of any other person. Except as disclosed in the footnotes to this table and subject to applicable community property laws, we believe that each shareholder identified in the table possesses sole voting and investment power over all ordinary shares shown as beneficially owned by the shareholder.

Certain of our existing shareholders and their affiliated entities, including affiliates of our directors, have indicated an interest in purchasing up to an aggregate of approximately $ million of our ordinary shares in this offering at the initial public offering price. However, because indications of interest are not binding agreements or commitments to purchase, the underwriters could determine to sell more, less or no shares to any of these existing shareholders and their affiliated entities and any of these existing shareholders and affiliated entities could determine to purchase more, less or no shares in this offering. The following table does not reflect any potential purchases by these parties.

Unless otherwise noted below, the address of each beneficial owner listed in the table is c/o WAVE Life Sciences Pte. Ltd., 8 Cross Street #10-00, PWC Building, Singapore 048424.

	Beneficial Ownership Prior to the Offering				Beneficial Ownership After the Offering					
	Ordinary Shares		Series A Preferred Shares		Ordinary Shares		Series A Preferred Shares			
Name	Shares	%	Shares	%	Shares	%	Shares	%	% of Total Voting Power	% of Total Voting Power (as-converted)**
5% Beneficial Owner										
RA Capital Healthcare Fund, L.P. (1)	1,290,000	35.8%	—	—			—	—		
Kagoshima Sinsangyo Sousei Investment Limited Partnership (2)	780,000	21.7	—	—			—	—		
Shin Nippon Biomedical Laboratories, Ltd. (3)	460,000	12.8	965,300	100.0%			965,300	100.0%		
Foresite Capital Fund III, L.P. (4)	330,000	9.2	—	—			—	—		
FMR LLC (5)	300,000	8.3	—	—			—	—		
Directors and Named Executive Officers										
Paul B. Bolno, M.D. (6)	84,613	2.3	—	—			—	—		
Christopher Francis, Ph.D. (7)	12,876	*	—	—			—	—		
Chandra Vargeese, Ph.D. (8)	15,909	*	—	—			—	—		
Gregory L. Verdine, Ph.D. (9)	112,351	3.1	—	—			—	—		
Peter Kolchinsky, Ph.D. (10)	1,290,000	35.8	—	—			—	—		
Koji Miura	—	—	—	—			—	—		
Ken Takanashi (11)	460,000	12.8	965,300	100.0			965,300	100.0		
Masaharu Tanaka (12)	780,000	21.7	—	—			—	—		
Dr. Takeshi Wada (13)	26,573	*	—	—			—	—		
All directors and executive officers as a group (11 individuals) (14)	2,788,004	74.6%	965,300	100.0%			965,300	100.0%		

* Indicates beneficial ownership of less than 1% of our outstanding ordinary shares.

** Represents the voting power with respect to all of our ordinary shares and Class A preferred shares, voting as a single class and on an as-converted to ordinary share basis. Following this offering, each Series A preferred share can be converted at any time on a one-for-one basis into ordinary shares at the discretion of the holder. See “Description of Share Capital” for additional information.

(1) Consists of (a) 1,240,120 ordinary shares held by RA Capital Healthcare Fund, L.P., or RA Capital, and (b) 49,880 ordinary shares held by Blackwell Partners LLC – Series A, or Blackwell, an affiliate of RA Capital. Dr. Peter Kolchinsky, a member of our board of directors is the managing member of RA Capital Management, LLC, the general partner of RA Capital and the investment advisor of Blackwell. Dr. Kolchinsky and RA Capital Management, LLC may be deemed to beneficially own the shares held by RA Capital and Blackwell. The address of RA Capital Healthcare Fund, L.P. and Blackwell is 20 Park Plaza, Suite 1200, Boston, MA 02116.

(2) Mr. Masaharu Tanaka, a member of our board of directors, is the President of Kagoshima Development Co. Ltd., the general partner of Kagoshima Shinsangyo Sousei Investment Limited Partnership, or KSS. Mr. Tanaka has the sole power to vote and dispose of the shares held by KSS and may be deemed to beneficially own these shares. The address of KSS is 6-1-20, Nanei Kagoshima City Kagoshima 891-0122, Japan.

(3) Consists of (a) 460,000 ordinary shares and 965,300 Series A preferred shares held by Shin Nippon Biomedical Laboratories, Ltd., or SNBL, whose address is 2438 Miyanoura-machi, Kagoshima City, Kagoshima 891-1394, Japan and (b) 40,000 ordinary shares held by SNBL USA, Ltd., or SNBL USA, an affiliate of SNBL, whose address is 6605 Merrill Creek Parkway, Everett, WA 98203. The board of directors of SNBL and SNBL USA has the power to vote and dispose of the shares held by their respective entities. Mr. Ken Takanashi, a member of our board of directors, is a director and executive officer of SNBL and its affiliates and in such capacity may be deemed to beneficially own the shares held by SNBL and SNBL USA.

(4) Foresite Capital Management III, LLC, or Foresite Management III, is the general partner of Foresite Capital Fund III, L.P., or Foresite Fund III, and in its capacity as such, Foresite Management III may be deemed to have sole voting and investment power over the shares held by Foresite Fund III. James Tananbaum is the managing member of Foresite Management III, and in his capacity as such, Mr. Tananbaum may be deemed to have sole voting and investment power over shares held by Foresite Fund III. The address of Mr. Tananbaum, Foresite Management III and Foresite Fund III is 101 California Street, Suite 4100, San Francisco, CA 94111.

(5) Consists of (a) 243,056 ordinary shares held by Fidelity Select Portfolios: Biotechnology Portfolio whose address is c/o Brown Brothers Harriman & Co., 525 Washington Blvd., Jersey City, NJ 07310 and (b) 56,944 ordinary shares held by Fidelity Advisor Series VII: Fidelity Advisor Biotechnology Fund, whose address is c/o State Street Bank & Trust, P.O. Box 5756, Boston, MA 02206. These entities are managed by direct or indirect subsidiaries of FMR LLC and are advised by Fidelity Management & Research Company, or FMR Co, a wholly owned subsidiary of FMR LLC. Edward C. Johnson 3d is a director and the Chairman of FMR LLC and Abigail P. Johnson is a director, the Vice Chairman and President of FMR LLC. Members of the family of Edward C. Johnson 3d, including Abigail P. Johnson, collectively, the Johnson Family Group, are the predominant owners, directly or through trusts, of Series B voting common shares of FMR LLC, representing 49% of the voting power of FMR LLC. The Johnson Family Group and all other Series B shareholders have entered into a shareholders’ voting agreement under which all Series B voting common shares will be voted in accordance with the majority vote of Series B voting common shares. Accordingly, through their ownership of voting common shares and the execution of the shareholders’ voting agreement, members of the Johnson Family Group may be deemed, under the Investment Company Act of 1940, to form a controlling group with respect to FMR LLC.

None of FMR LLC, Edward C. Johnson 3d or Abigail P. Johnson has the sole power to vote or direct the voting of the shares owned directly by these entities which power resides with the Fidelity Funds' Boards of Trustees. FMR Co carries out the voting of the shares under written guidelines established by the Fidelity Funds' Boards of Trustees. The address of FMR LLC is 245 Summer Street, V13H, Boston, MA 02110.

(6) Consists of 47,223 ordinary shares and 37,390 ordinary shares underlying options exercisable within 60 days of August 15, 2015.

(7) Consists of ordinary shares underlying options exercisable within 60 days of August 15, 2015.

(8) Consists of ordinary shares underlying options exercisable within 60 days of August 15, 2015.

(9) Consists of (a) 50,000 ordinary shares held by Dr. Verdine, (b) 60,678 ordinary shares underlying options exercisable within 60 days of August 15, 2015 held by Dr. Verdine and (c) 1,673 ordinary shares underlying options exercisable within 60 days of August 15, 2015, held by Dr. Verdine's spouse.

(10) Consists of 1,240,120 ordinary shares held by RA Capital, and 49,880 ordinary shares held by Blackwell, an affiliate of RA Capital. Dr. Kolchinsky is the managing partner of RA Capital Management, LLC, the general partner of RA Capital and the investment advisor of Blackwell and may be deemed to beneficially own the shares held by RA Capital and Blackwell.

(11) Consists of (a) 460,000 ordinary shares and 965,300 Series A preferred shares held by SNBL and (b) 40,000 ordinary shares held by SNBL USA. Mr. Takanashi is a director and executive officer of SNBL and its affiliates and in such capacity may be deemed to beneficially own the shares held by SNBL or SNBL USA. The board of directors of SNBL and SNBL USA has the power to vote and dispose of the shares held by their respective entities.

(12) Consists of 780,000 ordinary shares held by Kagoshima Shinsangyo Sousei Investment Limited Partnership, or KSS. Mr. Tanaka is the President of Kagoshima Development Co. Ltd., the general partner of KSS and has the sole power to vote and dispose of these shares. Mr. Tanaka may be deemed to beneficially own the shares held by KSS.

(13) Consists of 24,900 ordinary shares and 1,674 ordinary shares underlying options exercisable within 60 days of August 15, 2015.

(14) Consists of (a) 135,881 ordinary shares underlying options exercisable within 60 days of August 15, 2015, (b) 2,788,004 ordinary shares beneficially held by our directors and executive officers including shares issuable upon conversion of Series B preferred shares held by entities affiliated with certain of our directors and (c) 965,300 Series A preferred shares held by an entity affiliated with one of our directors.

DESCRIPTION OF SHARE CAPITAL

In connection with this offering, we will amend our memorandum and articles of association. Copies of the forms of our memorandum and articles of association are filed as exhibits to the registration statement of which this prospectus forms a part. Material provisions of our memorandum and articles of association and relevant sections of Singapore law are summarized below. The following summary is qualified in its entirety by the provisions of our memorandum and articles of association as amended in connection with this offering.

General

For the purposes of this section, references to "shareholders" mean those shareholders whose names and number of shares are entered in our shareholder register. Only persons who are registered in our shareholder register are recognized under Singapore law as shareholders of our company. As a result, only registered shareholders have legal standing to institute shareholder actions against us or otherwise seek to enforce their rights as shareholders. Holders of our shares which are held in "street name" will be required to be registered shareholders as reflected in our shareholder register in order to institute or enforce any legal proceedings or claims against us, our directors or our executive officers relating to shareholder rights. A holder of our shares which are held in "street name" may become a registered shareholder by exchanging its interest in our shares for certificated shares and being registered in our shareholder register.

As of June 30, 2015 there were outstanding:

- 2,282,123 ordinary shares held by six shareholders of record;
- 965,300 Series A preferred shares held by one shareholder of record;
- 1,320,000 Series B preferred shares held by 19 shareholders of record, after giving effect to the issuance of such shares in August 2015; and
- 480,849 ordinary shares issuable upon the exercise of outstanding share options, after giving effect to the issuance of options exercisable for 24,400 ordinary shares in July 2015.

The following description of our share capital and provisions of our memorandum and articles of association are summaries and are qualified by reference to the memorandum and articles of association that will be in effect on or before the closing of this offering and assumes the conversion of shares of our Series B preferred shares into ordinary shares on a one-for-one basis. Copies of these documents have been filed with the SEC as exhibits to the registration statement of which this prospectus forms a part. The description of the ordinary shares reflects changes to our capital structure that will occur upon the closing of this offering.

The Companies (Amendment) Act 2014 was passed in October 2014 and provides for certain amendments to be made to the Singapore Companies Act. The amendments introduced by way of the Companies (Amendment) Act 2014 are being implemented in two phases. The first phase of amendments to certain provisions of the Singapore Companies Act took effect on July 1, 2015, with the remaining amendments expected to come into effect in the first quarter of 2016.

Ordinary Shares

As of the date of this prospectus, our issued and paid-up share capital consists of ordinary shares. We currently have only one class of issued ordinary shares, which have identical rights in all respects and rank equally with one another. Our ordinary shares have no par value and there is no authorized share capital under Singapore law. There is a provision in our articles of association which enables us in specified circumstances to issue shares with preferential, deferred or other special rights or restrictions (except as to voting rights, which, prior to the second phase of implementation of the Companies (Amendment) Act 2014, are fixed at one vote for each ordinary share in a public company) as our directors may determine, subject to the provisions of the Singapore Companies Act and our articles of association. It is expected that the Singapore Companies Act will be amended in the second phase of implementation of the Companies (Amendment) Act 2014 to allow public companies such as our company to issue shares with different voting rights (including special, limited or conditional voting rights), subject to, among other things, the adoption by our shareholders of a special resolution approving such issuance.

All shares presently issued are fully paid and existing shareholders are not subject to any calls on shares. Although Singapore law does not recognize the concept of "non-assessability" with respect to newly-issued shares, we note that any purchaser of our shares who has fully paid up all amounts due with respect to such shares will not be subject under Singapore law to any personal liability to contribute to the assets or liabilities of our company in such purchaser's capacity solely as a holder of such shares. We believe that this interpretation is substantively consistent with the concept of "non-assessability" under most, if not all, U.S. state corporations laws. All shares are in registered form. We cannot, except in the circumstances permitted by the Singapore Companies Act, grant any financial assistance for the acquisition or proposed acquisition of our own shares. Except as described below under "—Takeovers," there are no limitations imposed by the laws of Singapore or by our memorandum and articles of association on the right of shareholders not resident in Singapore to hold or vote ordinary shares.

New Shares

Under the Singapore Companies Act, new shares may be issued only with the prior approval of our shareholders in a general meeting. General approval may be sought from our shareholders in a general meeting for the issue of shares. Approval, if granted, will lapse at the earlier of:

- the conclusion of the next annual general meeting;
- the expiration of the period within which the next annual general meeting is required by law to be held (i.e., within 15 months from the last annual general meeting); or
- the subsequent revocation or modification of approval by our shareholders acting at a duly noticed and convened meeting.

Our shareholders have provided such general authority to issue new shares until the conclusion of our 2015 Annual General Meeting. Such approval will lapse in accordance with the preceding paragraph if our shareholders do not grant a new approval at our annual general meeting. Subject to this and the provisions of the Singapore Companies Act and our articles of association, our board of directors may allot and issue or grant options over or otherwise dispose of new shares to such persons on such terms and conditions and with the rights and restrictions as they may think fit to impose.

Preferred Shares

Series A Preferred Shares

As of closing of this offering, we will have 965,300 Series A preferred shares outstanding. These shares are currently held by one of our largest shareholders, Shin Nippon Biomedical Laboratories, Ltd. Upon the closing of the offering, the rights of the Series A preferred shares will be identical to our ordinary shares, other than having (1) no voting rights other than in limited circumstances, (2) a liquidation preference equal to $0.01 per Series A preferred share, or an aggregate of $9,653 based on the number of Series A preferred shares currently outstanding and (3) the right to convert the Series A preferred shares at any time on a one-for-one basis into ordinary shares at the discretion of the holder.

The Series A preferred shares are not entitled to vote at any general meeting. The only instances in which the Series A preferred shares are able to vote at a general meeting would be if (but only if):

- the non-cumulative dividend payable on a Series A preferred share or any part thereof is in arrears and has remained unpaid for at least 12 months after it has been declared; and/or
- the matters to be discussed at the meeting relate to or there is intent to pass resolutions on (i) abrogating or changing the rights attached to the Series A preferred shares; and (ii) for the winding up of the Company, such resolutions would require the unanimous approval of the holders of the Series A preferred shares.

Upon the closing of this offering, the existing right of Series A preferred shares to a non-cumulative dividend, if and when declared by our board of directors, shall cease and be replaced by the $0.01 per share liquidation preference described above.

Other Preferred Shares

Our articles of association provide that we may issue shares of a different class with preferential, deferred, qualified or other special rights, privileges or conditions as our board of directors may determine. Under Singapore law, our preferred shareholders will have the right to attend any general meeting and in a poll at such general meeting, to have at least one vote for every preferred share held:

- upon any resolution concerning the winding-up of our company;
- upon any resolution which varies the rights attached to such preferred shares; or
- when the dividends to be paid on our preferred shares are more than twelve months in arrears, for the period they remain unpaid.

We may, subject to the prior approval in a general meeting of our shareholders, issue preferred shares which are, or at our option or are to be, subject to redemption provided that such preferred shares may not be redeemed out of capital unless:

- all the directors have made a solvency statement in relation to such redemption; and
- we have lodged a copy of the statement with the Accounting and Corporate Regulatory Authority of Singapore.

Further, the shares must be fully paid-up before they are redeemed.

The issue of preferred shares could have the effect of decreasing the trading price of our ordinary shares, restricting dividends on our ordinary shares, diluting the voting power of our ordinary shares, impairing the liquidation rights of our ordinary shares, or delaying or preventing a change in control of our company. As of the closing of this offering, we will have no preferred shares outstanding other than the Series A preferred shares described above. At present, we have no plans to issue additional preferred shares.

Transfer of Ordinary Shares

Subject to applicable securities laws in relevant jurisdictions and our articles of association, our ordinary shares are freely transferable. Shares may be transferred by a duly signed instrument of transfer in any usual or common form or in a form approved by the directors. The directors may decline to register any transfer unless, among other things, evidence of payment of any stamp duty payable with respect to the transfer is provided together with other evidence of ownership and title as the directors may require. We will replace lost or destroyed certificates for shares upon notice to us and upon, among other things, the applicant furnishing evidence and indemnity as the directors may require and the payment of all applicable fees.

Election and Re-election of Directors

We may, by ordinary resolution, remove any director before the expiration of his or her period of office, notwithstanding anything in our articles of association or in any agreement between us and such director. We may also, by an ordinary resolution, appoint another person in place of a director removed from office pursuant to the foregoing.

Subject to the Singapore Companies Act, under our articles of association, at each annual general meeting, our directors are required to retire from office. Retiring directors are eligible for re-election at that meeting.

Our board of directors shall have the power, at any time and from time to time, to appoint any person to be a director either to fill a casual vacancy or as an additional director so long as the total number of directors shall not at any time exceed the maximum number fixed by or in accordance with our articles of association.

Under our articles of association, no person other than a director retiring at a general meeting is eligible for appointment as a director at any general meeting, without the recommendation of the Board for election, unless (a) in the case of a member or members who in aggregate hold(s) more than 50% of the total number of our issued and paid-up shares (excluding treasury shares), not less than ten days, or (b) in the case of a member or members who in aggregate hold(s) more than 5% of the total number of our issued and paid-up shares (excluding treasury shares), not less than 120 days, before the date of the notice provided to members in connection with the general meeting, a written notice signed by such member or members (other than the person to be proposed for appointment) who (i) are qualified to attend and vote at the meeting for which such notice is given, and (ii) have held shares representing the prescribed threshold in (a) or (b) above, for a continuous period of at least one year prior to the date on which such notice is given, is lodged at our registered office. Such a notice must also include the consent of the person nominated.

Shareholders' Meetings

We are required to hold an annual general meeting each year and not more than 15 months after the date of our most recent annual general meeting. The directors may convene an extraordinary general meeting whenever they think fit and they must do so upon the written request of shareholders holding not less than 10% of the total number of paid-up shares carrying the right to vote at a general meeting. In addition, two or more shareholders holding not less than 10% of our total number of issued shares (excluding our treasury shares) may call a meeting of our shareholders.

A shareholder is entitled to attend and speak and vote at any general meeting. Unless otherwise required by law or by our articles of association, voting at general meetings is by ordinary resolution, requiring the affirmative vote of a majority of the shareholders present in person or represented by proxy at the meeting and entitled to vote on the resolution. An ordinary resolution suffices, for example, for appointments of directors. A special resolution, requiring an affirmative vote of not less than three-fourths of the shareholders present in person or represented by proxy at the meeting and entitled to vote on the resolution, is necessary for certain matters under Singapore law, such as an alteration of our articles of association. A shareholder entitled to attend and vote at a meeting of the company, or at a meeting of any class of shareholders of the company, shall be entitled to appoint another person or persons, whether a shareholder of the company or not, as his proxy to attend and vote instead of the shareholder at the meeting. A proxy appointed to attend and vote instead of the shareholder shall also have the same right as the shareholder to speak at the meeting, but unless the articles of association of the company otherwise provide, (i) a proxy shall not be entitled to vote except on a poll, (ii) a shareholder shall not be entitled to appoint more than two proxies to attend and vote at the same meeting and (iii) where a shareholder appoints two proxies the appointment shall be invalid unless the shareholder specifies the proportions of his holdings to be represented by each proxy.

Only registered shareholders of our company, and their proxies, will be entitled to attend, speak and vote at any meeting of shareholders. It is expected that the Singapore Companies Act will be amended in the second phase of implementation of the Companies (Amendment) Act 2014 to allow public companies to issue non-voting shares and shares with different voting rights (including special, limited or conditional voting rights), such that the holder of a share may vote on a resolution before a general meeting of the company if, in accordance with the provisions of Section 64 of the Singapore Companies Act, the share confers on the holder a right to vote on that resolution.

Voting Rights

Voting at any meeting of shareholders is by show of hands unless a poll has been demanded prior to or as a result of the show of hands by either (i) the chairman (being a person entitled to vote thereat) or (ii) at least one shareholder present in person or by proxy or by attorney or, in the case of a corporation, by a representative entitled to vote thereat, in each case representing in the aggregate not less than 10% of the total voting rights of all shareholders having the right to vote at the general meeting, provided that no poll shall be demanded in respect of an election of a chairman or relating to any adjournment of such meeting. On a poll every shareholder who is present in person or by proxy or by attorney, or in the case of a corporation, by a representative, has one vote for every share held by such shareholder. Proxies need not be shareholders. Only those shareholders who are registered in our shareholder register will be entitled to vote at any meeting of shareholders. It is expected that the Singapore Companies Act will be amended in the second phase of implementation of the Companies (Amendment) Act 2014 to lower the threshold of 10% of the total voting rights for the eligibility for shareholders to demand a poll to 5%.

Minority Rights

The rights of minority shareholders of Singapore companies are protected under Section 216 of the Singapore Companies Act, which gives the Singapore courts a general power to make any order, upon application by any shareholder of a company, as they think fit to remedy any of the following situations:

- the affairs of a company are being conducted or the powers of the board of directors are being exercised in a manner oppressive to, or in disregard of the interests of, one or more of the shareholders, including the applicant; or
- a company takes an action, or threatens to take an action, or the shareholders pass a resolution, or propose to pass a resolution, which unfairly discriminates against, or is otherwise prejudicial to, one or more of the shareholders, including the applicant.

Singapore courts have wide discretion as to the remedy they may grant, and the remedies listed in the Singapore Companies Act itself are not exclusive. In general, Singapore courts may, with a view to bringing to an end or remedying the matters complained of:

- direct or prohibit any act or cancel or modify any transaction or resolution;
- regulate the conduct of the affairs of the company in the future;
- authorize civil proceedings to be brought in the name of, or on behalf of, the company by a person or persons and on such terms as the court may direct;
- provide for the purchase of a minority shareholder's shares by the other shareholders or by the company itself and, in the case of a purchase of shares by the company, a corresponding reduction of its share capital;
- provide that the memorandum of association or the articles of association of the company be amended; or
- provide that the company be wound up.

Dividends

Subject to any preferential rights of holders of any outstanding preferred shares, holders of our ordinary shares will be entitled to receive dividends and other distributions in cash, shares or property as may be declared by our company from time to time. We may, by ordinary resolution, declare dividends at a general meeting of shareholders, but we are restricted from paying dividends in excess of the amount recommended by our board of directors. Pursuant to Singapore law and our articles of association, no dividend may be paid except out of our profits. To date, we have not declared any cash dividends on our ordinary shares and have no current plans to pay cash dividends in the foreseeable future. See "Dividend Policy" elsewhere in this prospectus.

Bonus and Rights Issues

In a general meeting, our shareholders may, upon the recommendation of the directors, capitalize any reserves or profits and distribute them as bonus shares, credited as paid-up, to the shareholders in proportion to their shareholdings.

Subject to the provisions of the Singapore Companies Act and our articles of association, our directors may also issue rights to take up additional ordinary shares to our shareholders in proportion to their respective ownership. Such rights are subject to any condition attached to such issue and the regulations of any stock exchange on which our shares are listed, as well as U.S. federal and blue sky securities laws applicable to such issue.

Takeovers

The Singapore Code on Take-overs and Mergers regulates, among other things, the acquisition of voting shares of Singapore-incorporated public companies. Any person acquiring, whether by a series of transactions over a period of time or not, either on his or her own or together with parties acting in concert with such person, 30% or more of our voting shares, or, if such person holds, either on his or her own or together with parties acting in concert with such person, between 30% and 50% (both amounts inclusive) of our voting shares, and if such person (or parties acting in concert with such person) acquires additional voting shares representing more than 1% of our voting shares in any

six-month period, must, except with the consent of the Securities Industry Council in Singapore, extend a mandatory takeover offer for the remaining voting shares in accordance with the provisions of the Singapore Code on Take-overs and Mergers. Responsibility for ensuring compliance with the Singapore Code on Take-overs and Mergers rests with parties (including company directors) to a take-over or merger and their advisors.

“Parties acting in concert” comprise individuals or companies who, pursuant to an agreement or understanding (whether formal or informal), cooperate, through the acquisition by any of them of shares in a company, to obtain or consolidate effective control of that company. Certain persons are presumed (unless the presumption is rebutted) to be acting in concert with each other. They are as follows:

- a company, its parent company, subsidiaries and fellow subsidiaries, the associated companies of any of the company and its related companies, subsidiaries and fellow subsidiaries, companies whose associated companies include any of these companies and any person who has provided financial assistance (other than a bank in the ordinary course of business) to any of the foregoing for the purchase of voting rights;
- a company with any of its directors (together with their close relatives, related trusts and companies controlled by any of the directors, their close relatives and related trusts);
- a company with any of its pension funds and employee share schemes;
- a person with any investment company, unit trust or other fund whose investment such person manages on a discretionary basis, but only in respect of the investment account which such person manages;
- a financial or other professional adviser, including a stockbroker, with its client in respect of the shareholdings of (i) the adviser and persons controlling, controlled by or under the same control as the adviser and (ii) all the funds managed by the adviser on a discretionary basis, where the shareholdings of the adviser and any of those funds in the client total 10% or more of the client’s equity share capital;
- directors of a company (together with their close relatives, related trusts and companies controlled by any of such directors, their close relatives and related trusts) which is subject to an offer or where the directors have reason to believe a bona fide offer for their company may be imminent;
- partners; and
- an individual and (i) such person’s close relatives, (ii) such person’s related trusts, (iii) any person who is accustomed to act in accordance with such person’s instructions, (iv) companies controlled by the individual, such person’s close relatives, related trusts or any person who is accustomed to act in accordance with such person’s instructions and (v) any person who has provided financial assistance (other than a bank in the ordinary course of business) to any of the foregoing for the purchase of voting rights.

A mandatory offer must be in cash or be accompanied by a cash alternative at not less than the highest price paid by the offeror or parties acting in concert with the offeror for voting rights of the offeree company during the offer period and within the six months prior to its commencement.

Under the Singapore Code on Take-overs and Mergers, where effective control of a company is acquired or consolidated by a person, or persons acting in concert, a general offer to all other shareholders is normally required. An offeror must treat all shareholders of the same class in an offeree company equally. A fundamental requirement is that shareholders in the company subject to the takeover offer must be given sufficient information, advice and time to consider and decide on the offer. These legal requirements may impede or delay a takeover of our company by a third-party.

We may submit an application to the Securities Industry Council of Singapore for a waiver from the Singapore Code on Take-overs and Mergers so that the Singapore Code on Take-overs and Mergers will not apply to our company for so long as we are not listed on a securities exchange in Singapore. We will make an appropriate announcement if we submit the application and when the result of the application is known.

Liquidation or Other Return of Capital

On a winding-up or other return of capital, subject to any special rights attaching the Series A preferred shares or to any other class of shares, holders of ordinary shares will be entitled to participate in any surplus assets in proportion to their shareholdings.

Limitations of Liability and Indemnification Matters

Section 172 of the Singapore Companies Act prohibits a company from exempting or indemnifying its officers (including directors acting in an executive capacity) or auditors against any liability, which by law would otherwise attach to them for any negligence, default, breach of duty or breach of trust of which they may be guilty relating to us. However, a company is not prohibited from (a) purchasing and maintaining for any such individual insurance against any such liability, or (b) indemnifying such individual against any liability incurred by him or her in defending any proceedings, whether civil or criminal, in which judgment is given in his favor or in which such individual is acquitted, or in connection with any application under Section 76A(13) or 391 or any other provision of the Singapore Companies Act in which relief is granted to him or her by the court. It is expected that the restriction in Section 172 of the Singapore Companies Act will be amended in the second phase of implementation of the Companies (Amendment) Act 2014 to enable a company to indemnify its officers against third party liability, except in circumstances where such liability is for any criminal or regulatory fines or penalties, or where such liability is incurred in respect of (i) defending criminal proceedings in which he or she is convicted, (ii) defending civil proceedings commenced by the company or a related company against him in which judgment is given against him or (iii) in connection with an application for relief under section 76A(13) or section 391 of the Singapore Companies Act in which the court refuses to grant him relief.

Subject to the Singapore Companies Act and every other Singapore statute for the time being in force concerning companies and affecting us, our articles of association provide that each of our directors and other officers and those of our subsidiaries and affiliates shall be entitled to be indemnified by us or such subsidiary against any liability incurred by him or her arising out of or in connection with any acts, omissions or conduct, actual or alleged, by such individual acting in his or her capacity as either director, officer, secretary or employee of us or the relevant subsidiary, except to such extent as would not be permitted under applicable Singapore laws or which would otherwise result in such indemnity being void in accordance with the provisions of the Singapore Companies Act.

We may indemnify our directors and officers against costs, charges, fees, expenses and liabilities that may be incurred by any of them in defending any proceedings (whether civil or criminal) relating to anything done or omitted or alleged to be done or omitted by such person acting in his or her capacity as a director, officer or employee of our company, in which judgment is given in his or her favor, or in which he or she is acquitted or in which the courts have granted relief pursuant to the provisions of the Singapore Companies Act or other applicable statutes, provided that such indemnity shall not extend to any liability which by law would otherwise attach to him or her in respect of any negligence, default, breach of duty or breach of trust in relation to our company, or which would otherwise result in such indemnity being voided under applicable Singapore laws. No director or officer of our company shall be liable for any acts, omissions, neglects, defaults or other conduct of any other director or officer, and to the extent permitted by Singapore law, our company shall contribute to the amount paid or payable by a director or officer in such proportion as is appropriate to reflect the relative fault of such director or officer, taking into consideration any other relevant equitable considerations, including acts of other directors or officers and our company, and the relative fault of such parties in respect thereof.

In addition, no director, managing director or other officer shall be liable for the acts, receipts, neglects or defaults of any other director or officer, or for joining in any receipt or other act for conformity, or for any loss or expense incurred by us, through the insufficiency or deficiency of title to any property acquired by order of the directors for us or for the insufficiency or deficiency of any security upon which any of our moneys are invested or for any loss or damage arising from the bankruptcy, insolvency or tortious act of any person with whom any moneys, securities or effects are deposited, or any other loss, damage or misfortune which happens in the execution of his duties, unless the same happens through his own negligence, default, breach of duty or breach of trust.

We have entered into deeds of indemnity with each of our directors and our chief executive officer. These agreements will require us to indemnify these individuals to the fullest extent permitted under Singapore law against liabilities that may arise by reason of their service to us, and to advance expenses incurred as a result of any proceeding against them as to which they could be indemnified, subject to our company reserving its rights to recover the full amount of such advances in the event that he or she is subsequently found to have been negligent or otherwise have breached his or her trust or fiduciary duties to our company or to be in default thereof, or where the Singapore courts have declined to grant relief, as provided in the Singapore Companies Act. These indemnification

rights shall not be exclusive of any other right which an indemnified person may have or hereafter acquire under any statute, provision of our articles of association, agreement, vote of shareholders or disinterested directors or otherwise.

We expect to maintain standard policies of insurance that provide coverage (1) to our directors and officers against loss rising from claims made by reason of breach of duty or other wrongful act and (2) to us with respect to indemnification payments that we may make to such directors and officers.

The proposed form of Underwriting Agreement, to be filed as Exhibit 1.1 to the registration statement of which this prospectus forms a part, provides for indemnification to us, our directors and officers by the underwriters against certain liabilities.

Singapore Sales Restrictions

This prospectus has not been and will not be lodged with or registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the ordinary shares may not be circulated or distributed, nor may the ordinary shares be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor, as defined under Section 4A(1)(c) of the Securities and Futures Act, Chapter 289 of Singapore, or the SFA, under Section 274 of the SFA, (ii) to a "relevant person" as defined in Section 275(2) of the SFA pursuant to Section 275(1) of the SFA, or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the ordinary shares are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

(a) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or

(b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor,

securities (as defined in Section 239(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation has acquired any securities pursuant to an offer made in reliance on an exemption under Section 275 of the SFA except:

- to an institutional investor or to a relevant person defined in Section 275(2) of the SFA, or (in the case of such corporation) where the transfer arises from an offer referred to in Section 275(1A) of the SFA or (in the case of such trust) where the transfer arises from an offer that is made on terms that such rights or interest are acquired at a consideration of not less than S$200,000 (or its equivalent foreign currency) for each transaction, whether such amount is to be paid for in cash or by exchange of securities or other assets;
- where no consideration is or will be given for the transfer;
- were the transfer is by operation of law;
- as specified in Section 276(7) of the SFA; or
- as specified in Regulation 32 of the Securities and Futures (Offers of Investments) (Shares and Debentures) Regulations 2005 of Singapore.

By accepting this prospectus, the recipient hereof represents and warrants that such recipient is entitled to receive it in accordance with the restrictions set forth above and agrees to be bound by the limitations contained herein. Any failure to comply with these limitations may constitute a violation of law.

Registration Rights

We are party to an investors' rights agreement dated as of August 14, 2015, pursuant to which all holders of our ordinary and preferred shares outstanding prior to this offering are entitled to demand Form S-3 and piggyback registration rights. Such shareholders have agreed not to exercise their registration rights during the lock-up period for this offering. See "Shares Eligible for Future Sale—Lock-up Agreements."

Demand Registration Rights

At any time after 180 days of the closing of this offering, the holders of at least a majority of the registrable securities have the right to require us to file one registration statement on Form S-1 to register all or a portion of their registrable securities provided that the anticipated aggregate offering price of the registrable securities to be sold under that registration statement on Form S-1 exceeds $25.0 million, net of underwriting discounts and commissions.

Form S-3 Registration Rights

After the closing of this offering, the holders of at least 30% of the registrable securities have the right to demand that we to file an unlimited number of registration statements on Form S-3 provided that the anticipated aggregate offering price of the registrable securities to be sold under the registration statement on Form S-3 exceeds $5.0 million, net of underwriting discounts and commissions.

Piggyback Registration Rights

If we propose to register any of our securities under the Securities Act of 1933, as amended, or the Securities Act, for sale to the public other than certain exceptions, the holders of registrable securities are entitled to receive notice of such registration and to request that we include their registrable securities for resale in the registration statement. The underwriters of the offering will have the right to limit the number of shares to be included in such registration.

Expenses of Registration; Indemnification

We are generally required to bear all registration expenses incurred in connection with the demand, Form S-3 and piggyback registrations described above, other than underwriting commissions and discounts and will pay the reasonable fees and expenses, not to exceed $25,000, of one special counsel to represent all participating shareholders in a registration. The investors' rights agreement contains customary indemnification provisions with respect to registration rights.

Termination of Registration Rights

The demand, Form S-3 and piggyback registration rights described above will terminate three years after the closing of this offering. In addition, the registration rights of a holder of registrable securities will expire if all of the holder's registrable securities may be sold in a three-month period under Rule 144 of the Securities Act.

Transfer Agent and Registrar and Register of Shareholders

The transfer agent and registrar for our ordinary shares will be Computershare Trust Company, N.A. Its address is 250 Royall Street, Canton, MA 02021.

Only persons who are registered in our shareholder register are recognized under Singapore law as shareholders of our company. We will not, except as required by applicable law, recognize any equitable, contingent, future or partial interest in any ordinary share or other rights for any ordinary share other than the absolute right thereto of the registered holder of that ordinary share. We may close our register of shareholders for any time or times, provided that our shareholder register may not be closed for an aggregate of more than 30 days in any calendar year. We typically close our shareholder register to, among others, determine shareholders' entitlement to receive dividends and other distributions and for the purposes of determining distribution of shareholder notices and related proxy voting materials to our shareholders or book-entry interest holders of our shares.

Listing

We have applied to list our ordinary shares on the NASDAQ Global Market under the symbol "WVE."

COMPARISON OF SHAREHOLDER RIGHTS

We are incorporated under the laws of Singapore. The following discussion summarizes material differences between the rights of holders of our ordinary shares and the rights of holders of the common stock of a typical corporation incorporated under the laws of the state of Delaware which result from differences in governing documents and the laws of Singapore and Delaware.

This discussion does not purport to be a complete statement of the rights of holders of our ordinary shares under applicable law in Singapore and our articles of association or the rights of holders of the common stock of a typical corporation under applicable Delaware law and a typical certificate of incorporation and bylaws.

The Singapore Companies Act contains the default articles that apply to a Singapore-incorporated company to the extent they are not excluded or modified by a company's articles of association. They provide examples of the common provisions adopted by companies in their articles of association. However, as is the usual practice for companies incorporated in Singapore, we have specifically excluded the application of these provisions in our articles of association, which we refer to below as our articles.

It is expected that the Singapore Companies Act will be amended in the second phase of implementation of the Companies (Amendment) Act 2014 such that public companies may not be permitted to adopt the model constitution to be prescribed under the Singapore Companies Act.

Delaware	Singapore
Board of Directors	
A typical certificate of incorporation and bylaws provides that the number of directors on the board of directors will be fixed from time to time by a vote of the majority of the authorized directors. Under Delaware law, a board of directors can be divided into classes and cumulative voting in the election of directors is only permitted if expressly authorized in a corporation's certificate of incorporation.	The memorandum and articles of association of companies will typically state the minimum and maximum number of directors as well as provide that the number of directors may be increased or reduced by shareholders via ordinary resolution passed at a general meeting, provided that the number of directors following such increase or reduction is within the maximum (if any) and minimum number of directors provided in our articles and the Singapore Companies Act, respectively.
Limitation on Personal Liability of Directors	
A typical certificate of incorporation provides for the elimination of personal monetary liability of directors for breach of fiduciary duties as directors to the fullest extent permissible under the laws of Delaware, except for liability (i) for any breach of a director's loyalty to the corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the Delaware General Corporation Law (relating to the liability of directors for unlawful payment of a dividend or an unlawful stock purchase or redemption) or (iv) for any transaction from which the director derived an improper personal benefit. A typical certificate of incorporation also provides that if the Delaware General Corporation Law is amended so as to allow further elimination of, or limitations on, director liability, then the liability of directors will be eliminated or limited to the fullest extent permitted by the Delaware General Corporation Law as so amended.	Pursuant to the Singapore Companies Act, any provision (whether in the articles of association, a contract with the company or otherwise) exempting or indemnifying a director (including directors acting in an executive capacity) against any liability which by law would otherwise attach to him or her in respect of any negligence, default, breach of duty or breach of trust of which such director may be guilty in relation to the company will be void. However, a company may indemnify a director against any liability incurred by him or her (i) in defending any proceedings (whether civil or criminal) in which judgment is given in his favor or in which the director is acquitted or (ii) in connection with any application under section 76A(13) or section 391 or any other provision of the Singapore Companies Act, in which relief is granted to him by the court. Singapore counsel to our company has advised that nevertheless, under common law in Singapore, a director can be released by the shareholders of a company for breaches of duty to a company except in the case of fraud, illegality,

Delaware	Singapore
	insolvency and oppression or disregard of minority interests. Our articles provide that subject to the provisions of the Singapore Companies Act, every director, managing director, secretary and other officer of the Company and its subsidiaries and affiliates, will be indemnified against any liability incurred by such person in defending any proceedings, whether civil or criminal, which relate to anything done or omitted or alleged to be done or omitted by such person as an officer or employee of the company and in which judgment is given in their favor or in which such person is acquitted or in connection with any application under the Singapore Companies Act or any other Singapore statute in which relief is granted to such person by the court unless the same should happen through their own negligence, default, breach of duty or breach of trust. Our company shall indemnify each of our directors to the extent permitted under applicable Singapore laws and shall procure indemnity insurance for each of our directors and officers. It is expected that the restriction in Section 172 of the Singapore Companies Act will be amended in the second phase of implementation of the Companies (Amendment) Act 2014 to enable a company to indemnify its officers against third party liability, except in circumstances where such liability is for any criminal or regulatory fines or penalties, or where such liability is incurred in respect of (i) defending criminal proceedings in which he or she is convicted, (ii) defending civil proceedings commenced by the company or a related company against him in which judgment is given against him or (iii) in connection with an application for relief under section 76A(13) or section 391 of the Singapore Companies Act in which the court refuses to grant him relief.
Interested Shareholders	
Section 203 of the Delaware General Corporation Law generally prohibits a Delaware corporation from engaging in specified corporate transactions (such as mergers, stock and asset sales, and loans) with an “interested stockholder” for three years following the time that the stockholder becomes an interested stockholder. Subject to specified exceptions, an “interested stockholder” is a person or group that owns 15% or more of the corporation’s outstanding voting stock (including any rights to acquire stock pursuant to an option, warrant, agreement, arrangement or understanding, or upon the exercise of conversion or exchange rights, and stock with respect to which the person has voting rights only), or is	There are no comparable provisions in Singapore with respect to public companies which are not listed on the Singapore Exchange Securities Trading Limited.

Delaware	Singapore
an affiliate or associate of the corporation and was the owner of 15% or more of the voting stock at any time within the previous three years. A Delaware corporation may elect to “opt out” of, and not be governed by, Section 203 through a provision in either its original certificate of incorporation, or an amendment to its original certificate or bylaws that was approved by majority stockholder vote. With a limited exception, this amendment would not become effective until 12 months following its adoption.	
Removal of Directors	
A typical certificate of incorporation and bylaws provide that, subject to the rights of holders of any preferred stock, directors may be removed at any time by the affirmative vote of the holders of at least a majority, or in some instances a supermajority, of the voting power of all of the then outstanding shares entitled to vote generally in the election of directors, voting together as a single class. A certificate of incorporation could also provide that such a right is only exercisable when a director is being removed for cause (removal of a director only for cause is the default rule in the case of a classified board).	According to the Singapore Companies Act, directors of a public company may be removed before expiration of their term of office, notwithstanding anything in its memorandum or articles or in any agreement between the public company and such directors, by ordinary resolution (i.e., a resolution which is passed by a simple majority of those shareholders present and voting in person or by proxy). Notice of the intention to move such a resolution has to be given to the company not less than 28 days before the meeting at which it is moved. The company shall then give notice of such resolution to its shareholders not less than 14 days before the meeting. Where any director removed in this manner was appointed to represent the interests of any particular class of shareholders or debenture holders, the resolution to remove such director will not take effect until such director’s successor has been appointed.
Filling Vacancies on the Board of Directors	
A typical certificate of incorporation and bylaws provide that, subject to the rights of the holders of any preferred stock, any vacancy, whether arising through death, resignation, retirement, disqualification, removal, an increase in the number of directors or any other reason, may be filled by a majority vote of the remaining directors, even if such directors remaining in office constitute less than a quorum, or by the sole remaining director. Any newly elected director usually holds office for the remainder of the full term expiring at the annual meeting of stockholders at which the term of the class of directors to which the newly elected director has been elected expires.	The articles of a Singapore company typically provide that the directors have the power to appoint any person to be a director, either to fill a vacancy or as an addition to the existing directors, but so that the total number of directors will not at any time exceed the maximum number (if any) fixed in the articles. Any director so appointed shall hold office until the next following annual general meeting, where such director will then be eligible for re-election. Our articles provide that the directors may appoint any person to be a director as an additional director or to fill a vacancy provided that any person so appointed will only hold office until the next annual general meeting, and will then be eligible for re-election.
Amendment of Governing Documents	
Under the Delaware General Corporation Law, amendments to a corporation’s certificate of incorporation require the approval of stockholders holding a majority of	Our memorandum and articles may be altered by special resolution (i.e., a resolution passed by at least a three-fourths majority of the shareholders entitled to

Delaware	Singapore
the outstanding shares entitled to vote on the amendment. If a class vote on the amendment is required by the Delaware General Corporation Law, a majority of the outstanding stock of the class is required, unless a greater proportion is specified in the certificate of incorporation or by other provisions of the Delaware General Corporation Law. Under the Delaware General Corporation Law, the board of directors may amend bylaws if so authorized in the charter. The stockholders of a Delaware corporation also have the power to amend bylaws.	vote, present in person or by proxy at a meeting for which not less than 21 days' written notice is given). The board of directors has no right to amend the memorandum or articles. Under the Singapore Companies Act, an entrenching provision may be included in the memorandum or articles with which a company is formed and may at any time be inserted into the memorandum or articles of a company only if all the shareholders of the company agree. An entrenching provision is a provision of the memorandum or articles of a company to the effect that other specified provisions of the memorandum or articles may not be altered in the manner provided by the Singapore Companies Act or may not be so altered except (i) by a resolution passed by a specified majority greater than 75% (the minimum majority required by the Singapore Companies Act for a special resolution) or (ii) where other specified conditions are met. The Singapore Companies Act provides that such entrenching provision may be removed or altered only if all the members of the company agree. It is expected that the Singapore Companies Act will be amended in the second phase of implementation of the Singapore Companies (Amendment) Act 2014 to include provisions whereby the constitutional documents of a company shall no longer be referred to as its memorandum of association and articles of association, but as its constitution.

Meetings of Shareholders

Annual and Special Meetings Typical bylaws provide that annual meetings of stockholders are to be held on a date and at a time fixed by the board of directors. Under the Delaware General Corporation Law, a special meeting of stockholders may be called by the board of directors or by any other person authorized to do so in the certificate of incorporation or the bylaws.	*Annual General Meetings* All companies are required to hold an annual general meeting once every calendar year and not more than 15 months after the date of the most recent annual general meeting. The first annual general meeting must be held within 18 months of the company's incorporation and subsequently, not more than 15 months may elapse between annual general meetings. *Extraordinary General Meetings* Any general meeting other than the annual general meeting is called an "extraordinary general meeting". Notwithstanding anything in the articles, directors of a company are required to convene an extraordinary general meeting if required to do so by requisition (i.e. written notice, requiring that a meeting be called, given to the directors) by shareholder(s) holding not less than 10% of the total number of paid-up shares as at the date of the deposit of the requisition carrying the right

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	of voting at general meetings of the company. In addition, the articles usually also provide that general meetings may be convened in accordance with the Singapore Companies Act by the directors.
Quorum Requirements	*Quorum Requirements*
Under the Delaware General Corporation Law, a corporation's certificate of incorporation or bylaws can specify the number of shares which constitute the quorum required to conduct business at a meeting, provided that in no event shall a quorum consist of less than one-third of the shares entitled to vote at a meeting.	Our articles provide that shareholders entitled to vote, holding in aggregate a majority of the number of our issued and paid-up shares, present in person or by proxy at a meeting, shall constitute a quorum. In the event a quorum is not present, the meeting may be adjourned for one week. When reconvened, the quorum for the meeting will be shareholders entitled to vote holding between them a majority of the number of our issued and paid-up shares, present in person or by proxy at such meeting.
	Shareholders' Rights at Meetings
	The Singapore Companies Act provides that every member shall, notwithstanding any provision in the memorandum or articles, have a right to attend any general meeting of the company and to speak and vote on any resolution before the meeting except that the company's articles may provide that a member shall not be entitled to vote unless all calls or other sums personally payable by him in respect of shares in the company have been paid. Notwithstanding the foregoing, the articles of association may provide that holders of preferred shares as defined in Section 4(1) of the Singapore Companies Act shall not have a right to vote at any general meeting other than in specified circumstances.
	It is expected that the Singapore Companies Act will be amended in the second phase of implementation of the Companies (Amendment) Act 2014 to allow public companies to issue non-voting shares, such that shareholders' entitlements under the Singapore Companies Act will extend only to attending and speaking at general meetings.
	Circulation of Shareholders' Resolutions
	Under the Singapore Companies Act, (a) any number of shareholders representing not less than 5% of the total voting rights of all the shareholders having at the date of requisition a right to vote at a meeting to which the requisition relates or (b) not less than 100 members holding shares on which there has been paid up an average sum, per shareholder, of not less than S$500, may requisition the company to give to shareholders notice of any resolution which may properly be moved and is intended to be moved at the next annual general meeting, and circulate to shareholders any statement of not more than 1,000 words with respect to the matter referred to in any proposed resolution or the business to be dealt with at that meeting.

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Indemnification of Officers, Directors and Employees

Under the Delaware General Corporation Law, subject to specified limitations in the case of derivative suits brought by a corporation's stockholders in its name, a corporation may indemnify any person who is made a party to any third-party action, suit or proceeding on account of being a director, officer, employee or agent of the corporation (or was serving at the request of the corporation in such capacity for another corporation, partnership, joint venture, trust or other enterprise) against expenses, including attorney's fees, judgments, fines and amounts paid in settlement actually and reasonably incurred by him or her in connection with the action, suit or proceeding through, among other things, a majority vote of a quorum consisting of directors who were not parties to the suit or proceeding, if the person:

- acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation or, in some circumstances, at least not opposed to its best interests; and
- in a criminal proceeding, had no reasonable cause to believe his or her conduct was unlawful.

Delaware corporate law permits indemnification by a corporation under similar circumstances for expenses (including attorneys' fees) actually and reasonably incurred by such persons in connection with the defense or settlement of a derivative action or suit, except that no indemnification may be made in respect of any claim, issue or matter as to which the person is adjudged to be liable to the corporation unless the Delaware Court of Chancery or the court in which the action or suit was brought determines upon application that the person is fairly and reasonably entitled to indemnity for the expenses which the court deems to be proper.

To the extent a director, officer, employee or agent is successful in the defense of such an action, suit or proceeding, the corporation is required by Delaware corporate law to indemnify such person for reasonable expenses incurred thereby. Expenses (including attorneys' fees) incurred by such persons in defending any action, suit or proceeding may be paid in advance of the final disposition of such action, suit or proceeding upon receipt of an undertaking by or on behalf of that person to repay the amount if it is ultimately determined that that person is not entitled to be so indemnified.

Section 172 of the Singapore Companies Act prohibits a company from exempting or indemnifying its officers (including directors acting in an executive capacity) or auditors against liability, which by law would otherwise attach to them for any negligence, default, breach of duty or breach of trust of which they may be guilty relating to the company.

However, the Singapore Companies Act allows a company to:

- purchase and maintain for any officer insurance against any liability which by law would otherwise attach to such officer in respect of any negligence, default, breach of duty or breach of trust of which such officer may be guilty in relation to the company;
- indemnify such officer or auditor against any liability incurred by such officer or auditor in defending any proceedings (whether civil or criminal) in which judgment is given in such officer's favor or in which such officer is acquitted; or
- indemnify such officer or auditor against any liability incurred by such officer or auditor in connection with any application under specified portions of the Singapore Companies Act in which relief is granted to such officer or auditor by a court.

In cases where a director is sued by the company, the Singapore Companies Act gives the court the power to relieve directors either wholly or partially from the consequences of their negligence, default, breach of duty or breach of trust. In order for relief to be obtained, it must be shown that (i) the director acted reasonably and honestly; and (ii) it is fair, having regard to all the circumstances of the case including those connected with such director's appointment, to excuse the director. However, Singapore case law has indicated that such relief will not be granted to a director who has benefited as a result of his or her breach of trust.

Our articles provide that subject to the provisions of the Singapore Companies Act, every director, managing director, secretary and other officer for the time being of our company and our subsidiaries and affiliates, will be indemnified by the company against any liability incurred by such person in defending any proceedings, whether civil or criminal, which relates to anything done or omitted or alleged to be done or omitted by

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	such person as an officer or employee of the company and in which judgment is given in their favor or in which such person is acquitted or in connection with any application under the Singapore Companies Act or any other Singapore statute in which relief is granted to such person by the court unless the same shall happen through their own negligence, default, breach of duty or breach of trust. It is expected that the restriction in Section 172 of the Singapore Companies Act will be amended in the second phase of implementation of the Companies (Amendment) Act 2014 to enable a company to indemnify its officers against third party liability, except in circumstances where such liability is for any criminal or regulatory fines or penalties, or where such liability is incurred in respect of (i) defending criminal proceedings in which he or she is convicted, (ii) defending civil proceedings commenced by the company or a related company against him in which judgment is given against him or (iii) in connection with an application for relief under section 76A(13) or section 391 of the Singapore Companies Act in which the court refuses to grant him relief.
Shareholder Approval of Issuances of Shares	
Under Delaware law, the board of directors has the authority to issue, from time to time, capital stock in its sole discretion, as long the number the shares to be issued, together with those shares that are already issued and outstanding and those shares reserved to be issued, do not exceed the authorized capital for the corporation as previously approved by the stockholders and set forth in the corporation's certificate of incorporation. Under the foregoing circumstances, no additional stockholder approval is required for the issuance of capital stock. Under Delaware law, stockholder approval is required (i) for any amendment to the corporation's certificate of incorporation to increase the authorized capital and (ii) for the issuance of stock in a direct merger transactions where the number of shares exceeds 20% of the corporation's shares outstanding prior to the transaction, regardless of whether there sufficient authorized capital.	Section 161 of the Singapore Companies Act provides that notwithstanding anything in the company's memorandum or articles, the directors shall not exercise any power to issue shares without prior approval of Company's shareholders at a general meeting of shareholders. The affirmative vote of shareholders holding at least a majority of the ordinary shares held by the shareholders present in person or represented by proxy at the annual general meeting and entitled to vote is required for this authorization. Once this shareholders' approval is obtained, unless previously revoked or varied by the company in general meeting, it continues in force until the conclusion of the next annual general meeting or the expiration of the period within which the next annual general meeting after that date is required by law to be held, whichever is earlier. Notwithstanding this general authorization to allot and issue our ordinary shares, WAVE will be required to seek shareholder approval with respect to future issuances of ordinary shares, where required under the NASDAQ Stock Market rules, such as if we were to propose an issuance of ordinary shares that would result in a change in control of WAVE or in connection with a transaction involving the issuance of ordinary shares representing 20% or more of our outstanding ordinary shares.

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Shareholder Approval of Business Combinations

Generally, under the Delaware General Corporation Law, completion of a merger, consolidation, or the sale, lease or exchange of substantially all of a corporation's assets or dissolution requires approval by the board of directors and by a majority (unless the certificate of incorporation requires a higher percentage) of outstanding stock of the corporation entitled to vote.

The Delaware General Corporation Law also requires a special vote of stockholders in connection with a business combination with an "interested stockholder" as defined in section 203 of the Delaware General Corporation Law. See "—Interested Shareholders" above.

The Singapore Companies Act mandates that specified corporate actions require approval by the shareholders in a general meeting, notably:

- notwithstanding anything in the company's memorandum or articles, directors are not permitted to carry into effect any proposals for disposing of the whole or substantially the whole of the company's undertaking or property unless those proposals have been approved by shareholders in a general meeting;
- the company may by special resolution resolve that it be wound up voluntarily or the court;
- subject to the memorandum of each amalgamating company, an amalgamation proposal must be approved by the shareholders of each amalgamating company via special resolution at a general meeting;
- a compromise or arrangement proposed between a company and its shareholders, or any class of them, must, among other things, be approved by a majority in number representing three-fourths in value of the shareholders or class of shareholders present and voting either in person or by proxy at the meeting ordered by the court; and
- notwithstanding anything in the company's memorandum or articles, the directors may not, without the prior approval of shareholders, issue shares, including shares being issued in connection with corporate actions.

Shareholder Action Without A Meeting

Under the Delaware General Corporation Law, unless otherwise provided in a corporation's certificate of incorporation, any action that may be taken at a meeting of stockholders may be taken without a meeting, without prior notice and without a vote if the holders of outstanding stock, having not less than the minimum number of votes that would be necessary to authorize such action, consent in writing. It is not uncommon for a corporation's certificate of incorporation to prohibit such action.

There are no equivalent provisions in respect of public companies which are listed on a securities exchange outside Singapore, like our company. As a result, shareholder action by written consent is not permitted.

Shareholder Suits

Under the Delaware General Corporation Law, a stockholder may bring a derivative action on behalf of the corporation to enforce the rights of the corporation. An individual also may commence a class action suit on

Standing

Only registered shareholders of our company reflected in our shareholder register are recognized under Singapore law as shareholders of our company. As a

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behalf of himself or herself and other similarly situated stockholders where the requirements for maintaining a class action under the Delaware General Corporation Law have been met. A person may institute and maintain such a suit only if such person was a stockholder at the time of the transaction which is the subject of the suit or his or her shares thereafter devolved upon him or her by operation of law. Additionally, under Delaware case law, the plaintiff generally must be a stockholder not only at the time of the transaction which is the subject of the suit, but also through the duration of the derivative suit. The Delaware General Corporation Law also requires that the derivative plaintiff make a demand on the directors of the corporation to assert the corporate claim before the suit may be prosecuted by the derivative plaintiff, unless such demand would be futile.	result, only registered shareholders have legal standing to institute shareholder actions against us or otherwise seek to enforce their rights as shareholders. Holders of book-entry interests in our shares will be required to exchange their book-entry interests for certificated shares and to be registered as shareholders in our shareholder register in order to institute or enforce any legal proceedings or claims against us, our directors or our executive officers relating to shareholder rights. A holder of book-entry interests may become a registered shareholder of our company by exchanging its interest in our shares for certificated shares and being registered in our shareholder register. *Personal remedies in cases of oppression or injustice* A shareholder may apply to the court for an order under Section 216 of the Singapore Companies Act to remedy situations where (i) the company's affairs are being conducted or the powers of the company's directors are being exercised in a manner oppressive to, or in disregard of the interests of one or more of the shareholders or holders of debentures of the company, including the applicant; or (ii) the company has done an act, or threatens to do an act, or the shareholders or holders of debentures have passed some resolution, which unfairly discriminates against, or is otherwise prejudicial to, one or more of the company's shareholders or holders of debentures, including the applicant. Singapore courts have wide discretion as to the relief they may grant under such application, including, *inter alia*, directing or prohibiting any act or cancelling or varying any transaction or resolution, providing that the company be wound up, or authorizing civil proceedings to be brought in the name of or on behalf of the company by such person or persons and on such terms as the court directs. *Derivative actions and arbitrations* The Singapore Companies Act has a provision which provides a mechanism enabling shareholders to apply to the court for leave to bring a derivative action or commence an arbitration on behalf of the company. Derivative actions are also allowed as a common law action. Applications are generally made by shareholders of the company, but courts are given the discretion to allow such persons as they deem proper to apply (e.g., beneficial owner of shares). It should be noted that this provision of the Singapore Companies Act is primarily used by minority shareholders to bring an action or arbitration in the

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	name and on behalf of the company or intervene in an action or arbitration to which the company is a party for the purpose of prosecuting, defending or discontinuing the action or arbitration on behalf of the company. Prior to commencing a derivative action or arbitration, the court must be satisfied that (i) 14 days' notice has been given to the directors of the company of the party's intention to commence such action or arbitration if the directors of the company do not bring, diligently prosecute or defend or discontinue the action, (ii) the party is acting in good faith and (iii) it appears to be prima facie in the interests of the company that the action be brought, prosecuted, defended or discontinued. *Class actions* The concept of class action suits, which allows individual shareholders to bring an action seeking to represent the class or classes of shareholders, does not exist in Singapore. However, it is possible as a matter of procedure for a number of shareholders to lead an action and establish liability on behalf of themselves and other shareholders who join in or who are made parties to the action. These shareholders are commonly known as "lead plaintiffs."
Distributions and Dividends; Repurchases and Redemptions	
The Delaware General Corporation Law permits a corporation to declare and pay dividends out of statutory surplus or, if there is no surplus, out of net profits for the fiscal year in which the dividend is declared and/or for the preceding fiscal year as long as the amount of capital of the corporation following the declaration and payment of the dividend is not less than the aggregate amount of the capital represented by the issued and outstanding stock of all classes having a preference upon the distribution of assets. Under the Delaware General Corporation Law, any corporation may purchase or redeem its own shares, except that generally it may not purchase or redeem these shares if the capital of the corporation is impaired at the time or would become impaired as a result of the redemption. A corporation may, however, purchase or redeem out of capital shares that are entitled upon any distribution of its assets to a preference over another class or series of its shares if the shares are to be retired and the capital reduced.	The Singapore Companies Act provides that no dividends can be paid to shareholders except out of profits. The Singapore Companies Act does not provide a definition on when profits are deemed to be available for the purpose of paying dividends and this is accordingly governed by case law. Our articles provide that no dividend can be paid otherwise than out of profits. *Acquisition of a company's own shares* The Singapore Companies Act generally prohibits a company from acquiring its own shares or purporting to acquire the shares of its holding company or ultimate holding company, whether directly or indirectly, in any way, subject to certain exceptions. Any contract or transaction made or entered into in contravention of the aforementioned prohibition by which a company acquires or purports to acquire its own shares or shares in its holding company or ultimate holding company is void. However, provided that it is expressly permitted to do so by its articles and subject to the special conditions of each permitted acquisition contained in the Singapore Companies Act, a company may: n redeem redeemable preferred shares on such terms and in such manner as is provided by its

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	articles of association. Preferred shares may be redeemed out of capital if all the directors make a solvency statement in relation to such redemption in accordance with the Singapore Companies Act, and the company lodges a copy of the statement with the Registrar of Companies; n whether listed on a securities exchange in Singapore or any securities exchange outside Singapore, or not, make an off-market purchase of its own shares in accordance with an equal access scheme authorized in advance at a general meeting; n make a selective off-market purchase of its own shares in accordance with an agreement authorized in advance at a general meeting by a special resolution where persons whose shares are to be acquired and their associated persons have abstained from voting; and n whether listed on a securities exchange in Singapore or any securities exchange outside Singapore, or not, make an acquisition of its own shares under a contingent purchase contract which has been authorized in advance at a general meeting by a special resolution. A company may also purchase its own shares by an order of a Singapore court. The total number of ordinary shares in any class and non-redeemable preferred shares that may be acquired by a company in a relevant period may not exceed 20% (or such other prescribed percentage) of the total number of ordinary shares, or non-redeemable preferred shares (as the case may be) in that class as of the date of the resolution to acquire the shares. Where, however, a company has reduced its share capital by a special resolution or a Singapore court made an order to such effect, the total number of ordinary shares or non-redeemable preferred shares in any class shall be taken to be the total number of ordinary shares, or non-redeemable preferred shares (as the case may be) in that class as altered by the special resolution or the order of the court. Payment, including any expenses (including brokerage or commission) incurred directly in the acquisition by the company of its own shares, may be made out of the company's profits or capital, provided that the company is solvent.

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	Financial assistance for the acquisition of shares A public company or a company whose holding company or ultimate holding company is a public company may not give financial assistance to any person whether directly or indirectly for the purpose of or in connection with: n the acquisition or proposed acquisition of shares in the company or units of such shares; or n the acquisition or proposed acquisition of shares in its holding company or ultimate holding company, or units of such shares. Financial assistance may take the form of a loan, the giving of a guarantee, the provision of security, the release of an obligation, the release of a debt or otherwise. However, it should be noted that a company may provide financial assistance for the acquisition of its shares or shares in its holding company or ultimate holding company if it complies with the requirements (including approval by special resolution) set out in the Singapore Companies Act. Our articles provide that subject to the provisions of the Singapore Companies Act, we may purchase or otherwise acquire our own shares upon such terms and subject to such conditions as we may deem fit. These shares may be held as treasury shares or cancelled as provided in the Singapore Companies Act or dealt with in such manner as may be permitted under the Singapore Companies Act. On cancellation of the shares, the rights and privileges attached to those shares will expire.
Transactions with Officers or Directors	
Under the Delaware General Corporation Law, some contracts or transactions in which one or more of a corporation's directors has an interest are not void or voidable because of such interest provided that some conditions, such as obtaining the required approval and fulfilling the requirements of good faith and full disclosure, are met. Under the Delaware General Corporation Law, either (a) the stockholders or the board of directors of a corporation must approve in good faith any such contract or transaction after full disclosure of the material facts or (b) the contract or transaction must have been "fair" as to the corporation at the time it was approved. If board approval is sought, the contract or transaction must be approved in good faith by a majority of disinterested directors after full disclosure of material facts, even though less than a majority of a quorum.	Under the Singapore Companies Act, directors are not prohibited from dealing with the company, but where they have an interest in a transaction with the company, that interest must be disclosed to the board of directors. In particular, every director who is in any way, whether directly or indirectly, interested in a transaction or proposed transaction with the company must, as soon practicable after the relevant facts have come to such director's knowledge, declare the nature of such director's interest at a board of directors' meeting. In addition, a director who holds any office or possesses any property which directly or indirectly might create interests in conflict with such director's duties as director is required to declare the fact and the nature, character and extent of the conflict at a meeting of directors.

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	The Singapore Companies Act extends the scope of this statutory duty of a director to disclose any interests by pronouncing that an interest of a member of a director's family (including spouse, son, adopted son, step-son, daughter, adopted daughter and step-daughter) will be treated as an interest of the director. A director shall not be deemed to be interested or at any time interested in a transaction or proposed transaction where the interest of the director consists only of being a member or creditor of a corporation which is interested in the transaction or proposed transaction with the company if the interest may properly be regarded as immaterial. Where the transaction or the proposed transaction relates to any loan to the company, no disclosure need be made where the director has only guaranteed the repayment of such loan, unless the articles of association provide otherwise. Further, where the transaction or the proposed transaction has been or will be made with or for the benefit of a related corporation (i.e. the holding company, subsidiary or subsidiary of a common holding company), the director shall not be deemed to be interested or at any time interested in such transaction or proposed transaction, unless the articles of association provide otherwise. Subject to specified exceptions, the Singapore Companies Act prohibits a company from making a loan to its directors or to directors of a related corporation, or giving a guarantee or security in connection with such a loan. Companies are also prohibited from making loans to its directors' spouse or children (whether adopted or natural or step-children), or giving a guarantee or security in connection with such a loan. Subject to specified exceptions, the Singapore Companies Act prohibits a company from making a loan to another company or entering into any guarantee or providing any security in connection with a loan made to another company by a person other than the first-mentioned company, if a director or directors of the first-mentioned company is or together are interested in 20% or more of the total number of equity shares in the other company (excluding treasury shares). Such prohibition shall extend to apply to a loan, guarantee or security in connection with a loan made by a company to another company where such other company is incorporated outside Singapore, if a director or directors of the first-mentioned company (a)

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	is or together are interested in 20% or more of the total number of equity shares in the other company (excluding treasure shares) or (b) in a case where the other company does not have a share capital, exercises or together exercise control over the other company whether by reason of having the power to appoint directors or otherwise. The Singapore Companies Act also provides that an interest of a member of a director's family (including spouse, son, adopted son, step-son, daughter, adopted daughter and step-daughter) will be treated as an interest of the director. It is expected that the Singapore Companies Act will be amended in the second phase of implementation of the Companies (Amendment) Act 2014 to require disclosure by the chief executive officer of his or her interest and any conflict of interest, and to allow directors and chief executive officers to make disclosure by sending a written notice to the company containing details on the nature, character and extent of his or her interest. A company will also be prohibited from, among others, (i) making a quasi-loan to and (ii) entering into a credit transaction as creditor with, its directors or directors of a related corporation. In addition, a company will also be prohibited from, among others, (i) making a quasi-loan to and (ii) entering into a credit transaction as creditor for, another company or a limited liability partnership, if a director or directors of the first-mentioned company is or together are interested in 20% or more of the total voting power in the other company or the limited liability partnership, as the case may be, unless there is prior approval by the company in general meeting for the making of, provision for or entering into the loan, quasi-loan, credit transaction, guarantee or security (as the case may be) at which the interested director or directors and his or their family members abstained from voting.
Dissenters' Rights	
Under the Delaware General Corporation Law, a stockholder of a corporation participating in some types of major corporate transactions may, under varying circumstances, be entitled to appraisal rights pursuant to which the stockholder may receive cash in the amount of the fair market value of his or her shares in lieu of the consideration he or she would otherwise receive in the transaction.	There are no equivalent provisions in Singapore under the Singapore Companies Act.

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Cumulative Voting	
Under the Delaware General Corporation Law, a corporation may adopt in its bylaws that its directors shall be elected by cumulative voting. When directors are elected by cumulative voting, a stockholder has the number of votes equal to the number of shares held by such stockholder times the number of directors nominated for election. The stockholder may cast all of such votes for one director or among the directors in any proportion.	There is no equivalent provision in respect of companies incorporated in Singapore.

SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering, there has been no public market for our ordinary shares. Future sales of substantial amounts of our ordinary shares in the public market, or the perception that such sales may occur, could adversely affect the prevailing market price of our ordinary shares. No prediction can be made as to the effect, if any, future sales of shares, or the availability of shares for future sales, will have on the market price of our ordinary shares prevailing from time to time. The sale of substantial amounts of our ordinary shares in the public market, or the perception that such sales could occur, could harm the prevailing market price of our ordinary shares.

Upon completion of this offering we will have ordinary shares outstanding. As a result of the lock-up agreements, other contractual restrictions on resale and the provisions of Rule 144, described below, our ordinary shares will be available for sale in the public market as follows: (i) ordinary shares to be sold in this offering, plus any shares sold upon exercise of the underwriters' option to purchase additional shares, will be freely tradable without restriction or further registration under the Securities Act (other than restrictions pursuant to lock-up agreements entered into by participants in the directed share program) and (ii) ordinary shares will be available for sale at various times after 180 days after the date of this prospectus (subject, in some cases, to volume limitations).

Sale of Restricted Shares

All of the ordinary shares sold in this offering will be freely tradable without restriction or further registration under the Securities Act, except that any shares purchased by or owned by our "affiliates," as that term is defined in Rule 144 under the Securities Act, may generally only be sold publicly in compliance with the limitations of Rule 144 described below. As defined in Rule 144, an affiliate of an issuer is a person that directly or indirectly, through one or more intermediaries, controls, or is controlled by or is under common control with, such issuer. Immediately following the completion of this offering, shares, or % of our ordinary shares will be "restricted securities" as that term is used in Rule 144. Subject to contractual restrictions, including the lock-up agreement described below, the holders of these shares will be entitled to sell these shares in the public market only if the sale of such shares is registered with the SEC or if the sale of such shares qualifies for an exemption from registration under Rule 144 or any other applicable exemption under the Securities Act. At such time as these restricted shares become unrestricted and available for sale, the sale of these restricted shares, whether pursuant to Rule 144 or otherwise, may have a negative effect on the price of our ordinary shares.

Rule 144

In general, under Rule 144 of the Securities Act as currently in effect, once we have been subject to public company reporting requirements for at least 90 days, a person who is not deemed to have been one of our affiliates for purposes of the Securities Act at any time during 90 days preceding a sale and who has beneficially owned the shares proposed to be sold for at least six months, including the holding period of any prior owner other than our affiliates, is entitled to sell such shares without complying with the manner of sale, volume limitation or notice provisions of Rule 144, subject to compliance with the public information requirements of Rule 144. If such a person has beneficially owned the shares proposed to be sold for at least one year, including the holding period of any prior owner other than our affiliates, then such person is entitled to sell such shares without complying with any of the requirements of Rule 144.

In general, under Rule 144 as currently in effect, our affiliates or persons selling shares on behalf of our affiliates are entitled to sell within any three-month period beginning 90 days after the date of this prospectus, a number of shares that does not exceed the greater of:

- 1% of the number of our ordinary shares then outstanding; or
- the average weekly trading volume of our ordinary shares during the four calendar weeks preceding the filing of a notice on Form 144 with respect to such sale.

Rule 144 also provides that a person who is not deemed to have been an affiliate of ours at any time during the three months preceding a sale and who has for at least six months beneficially owned ordinary shares that are restricted securities, will be entitled to freely sell such ordinary shares subject only to the availability of current public information regarding us. A person who is not deemed to have been an affiliate of ours at any time during the

three months preceding a sale and who has beneficially owned for at least one year our ordinary shares that are restricted securities, will be entitled to freely sell such ordinary shares under Rule 144 without regard to the current public information requirements of Rule 144.

Rule 701

In general, under Rule 701 as currently in effect, any of our employees, directors, officers, consultants or advisors who purchased shares from us in connection with a qualified compensatory share or option plan or other written agreement before the effective date of this offering is eligible to resell such shares 90 days after the effective date of this offering in reliance on Rule 144. Securities issued in reliance of Rule 701 are "restricted securities" and, subject to the contractual restrictions described below, beginning 90 days after the date of this prospectus, may be sold by persons other than "affiliates" subject only to the manner of sale provisions of Rule 144 and by "affiliates" under Rule 144 without compliance with its one year minimum holding requirement.

Registration Rights

As described above in "Certain Relationships and Related Party Transactions—Registration Rights," following the completion of this offering, subject to the 180-day lock-up period described below, all holders of our ordinary shares and preferred shares outstanding prior to this offering will be entitled, subject to certain exceptions, to certain rights with respect to the registration under the Securities Act of the ordinary shares held by them. By exercising their registration rights and causing a large number of shares to be registered and sold in the public market, our existing shareholders could cause the price of our ordinary shares to fall. In addition, any demand to include such shares in our registration statements could have a material adverse effect on our ability to raise needed capital. We have not granted any other holders of our securities any registration rights. See "Description of Share Capital—Registration Rights" for a description of these rights.

Form S-8 Registration Statements

We intend to file with the SEC one or more registration statements on Form S-8 under the Securities Act to register all ordinary shares ordinary shares that are issuable under the 2014 Plan. These registration statement will become effective upon filing with the SEC. Shares registered under such registration statement will be available for sale in the open market following the effective date, unless such shares are subject to vesting restrictions with us, Rule 144 restrictions applicable to our affiliates or the lock-up restrictions described below.

Lock-Up Agreements

We and each of our directors and executive officers, and holders of all or substantially all our outstanding share capital and other securities, have agreed that, without the prior written consent of Jefferies LLC and Leerink Partners LLC on behalf of the underwriters, we and they will not (subject to certain exceptions), during the period ending 180 days after the date of this prospectus:

- sell, offer to sell, contract to sell or lend, effect any short sale or establish or increase an open "put equivalent position" within the meaning of Rule 16a-1(h) under the Securities Exchange Act of 1934, as amended, pledge, hypothecate or grant any security interest in, or in any other way transfer or dispose of, directly or indirectly, any ordinary shares or any other securities convertible into or exercisable or exchangeable for ordinary shares held prior to the completion of this offering;
- enter into any swap, hedge or similar arrangement or agreement that transfers, in whole or in part, the economic risk of ownership of the ordinary shares or any other securities convertible or exercisable or exchangeable for ordinary shares held prior to the completion of this offering, regardless of whether any transaction described above is to be settled by delivery of securities, in cash or otherwise;
- make any demand for, or exercise any right with respect to, the registration under the Securities Act of the offer and sale of any ordinary shares or securities convertible or exchangeable or exercisable for ordinary shares held prior to the completion of this offering, or cause to be filed a registration statement, prospectus or prospectus supplement (or an amendment or supplement thereto) with respect to any such registration; or
- publicly announce any intention to do any of the foregoing.

For additional information, see the section titled "Underwriting."

MATERIAL TAX CONSIDERATIONS

Material U.S. Federal Income Tax Considerations

Subject to the limitations and qualifications stated herein, this discussion sets forth a summary of material U.S. federal income tax consequences of the purchase, ownership and disposition of the ordinary shares. The discussion is based on the U.S. Internal Revenue Code of 1986, as amended, its legislative history, final, temporary and proposed regulations thereunder, published rulings and court decisions, all as currently in effect and all subject to change at any time, possibly with retroactive effect. We cannot assure you that a change in law will not alter significantly the tax considerations described in this summary. We have not sought and do not expect to seek any rulings from the U.S. Internal Revenue Service, or the IRS, regarding the matters discussed below. There can be no assurance that the IRS will not take positions concerning the tax consequences of the purchase, ownership or disposition of our ordinary shares that differ from those discussed below.

The discussion of the holders' tax consequences addresses only those persons that acquire their ordinary shares in this offering and that hold those ordinary shares as capital assets (generally, property held for investment) and does not address the tax consequences to any special class of holder, including without limitation, holders of (directly, indirectly or constructively) 10% or more of the ordinary shares, dealers in securities or currencies, banks, tax-exempt organizations, qualified retirement plans, individual retirement accounts and other tax-deferred accounts, life insurance companies, financial institutions, broker-dealers, regulated investment companies, real estate investment trusts, traders in securities that elect the mark-to-market method of accounting for their securities holdings, persons that hold securities that are a hedge or that are hedged against currency or interest rate risks or that are part of a straddle, conversion or "integrated" transaction, persons that are not U.S. Holders (as defined below), persons who acquired our ordinary shares pursuant to the exercise of an employee share option or otherwise as compensation, partnerships or other entities classified as partnerships for U.S. federal income tax purposes and U.S. Holders (as defined below) whose functional currency for U.S. federal income tax purposes is not the U.S. dollar. This discussion does not address the effect of the U.S. federal alternative minimum tax, or U.S. federal gift, estate or generation-skipping transfer tax, or any state, local or foreign tax laws on a holder of ordinary shares.

For purposes of this discussion, a "U.S. Holder" is a beneficial owner of ordinary shares that is for U.S. federal income tax purposes:

- an individual who is a citizen or resident of the United States;
- a corporation (or other entity taxable as a corporation for U.S. federal income tax purposes) created or organized in or under the laws of the United States, any state thereof or the District of Columbia;
- an estate the income of which is subject to U.S. federal income taxation regardless of its source; or
- a trust (i) if a court within the U.S. can exercise primary supervision over its administration, and one or more U.S. persons have the authority to control all of the substantial decisions of that trust, or (ii) that was in existence on August 20, 1996, and validly elected under applicable Treasury Regulations to continue to be treated as a domestic trust.

If a partnership or an entity or arrangement that is treated as a partnership for U.S. federal income tax purposes holds our ordinary shares, the U.S. federal income tax treatment of a partner in the partnership will generally depend upon the status of the partner and the activities of the partnership. Partnerships that hold our ordinary shares and partners in such partnerships should consult their own tax advisors regarding the particular U.S. federal, state, local and foreign tax consequences of owning and disposing of ordinary shares.

If you are considering the purchase of our ordinary shares, you should consult your own tax advisors concerning the particular U.S. federal income tax consequences to you of the purchase, ownership and disposition of our ordinary shares, as well as the consequences to you arising under other U.S. federal tax laws and the laws of any other applicable taxing jurisdiction and any applicable tax treaty in light of your particular circumstances.

Dividends and Other Distributions

As described in the section titled "Dividend Policy," we do not currently anticipate declaring or paying cash dividends to holders of our ordinary shares in the foreseeable future. However, subject to the discussion below on the

passive foreign investment company rules, if we do make distributions of cash or other property in respect of our ordinary shares, other than certain pro rata distributions of ordinary shares, the U.S. dollar amount of the gross amount of any such distribution will be taxable as a dividend, to the extent paid out of our current or accumulated earnings and profits (as determined under U.S. federal income tax principles). Such income will be includable in your gross income on the day actually or constructively received by you. The amount of any distribution of property other than cash will be the fair market value of that property on the date of distribution. To the extent the amount of the distribution exceeds our current and accumulated earnings and profits (as determined under U.S. federal income tax principles), such excess amount will be treated first as a tax-free return of your tax basis in your ordinary shares, and then, to the extent such excess amount exceeds your tax basis in your ordinary shares, as capital gain. We, however, may not calculate earnings and profits in accordance with U.S. federal tax principles. In that case, we intend to treat the full amount of any distribution by us to U.S. Holders as a dividend for U.S. federal income tax purposes. The amount of the dividend will generally be treated as foreign-source dividend income to U.S. Holders. U.S. Holders of the ordinary shares that are corporations generally will not be entitled to claim a "dividends received deduction" with respect to dividends paid on the ordinary shares.

Dividends received by a non-corporate U.S. Holder, including an individual, may qualify for the lower rates of tax applicable to "qualified dividend income," provided that (i) we are not a passive foreign investment company (as defined below) for our taxable year in which the dividend is paid or in the preceding taxable year, and (ii) certain holding period and other requirements are met.

You should consult your own tax advisors regarding the availability of the lower tax rates applicable to qualified dividend income for any dividends that we pay with respect to the ordinary shares, as well as the effect of any change in applicable law.

A U.S. Holder who pays (whether directly or through withholding) Singapore income tax with respect to dividends paid on our ordinary shares generally will be entitled, at the election of such U.S. Holder, to receive either a deduction or credit for such Singapore income tax paid. The rules relating to the determination of the foreign tax credit are complex and you should consult your own tax advisors regarding the availability of a foreign tax credit in your particular circumstances.

Disposition of the Ordinary Shares

You will recognize gain or loss on a sale, exchange or other taxable disposition of our ordinary shares in an amount equal to the difference between the amount realized (in U.S. dollars) on the sale, exchange or taxable disposition and your tax basis (in U.S. dollars) in the ordinary shares. Subject to the passive foreign investment company rules discussed below, such gain or loss generally will be capital gain or loss. If you are a non-corporate U.S. Holder, including an individual, that has held the ordinary shares for more than one year, you will be eligible for reduced tax rates. The deductibility of capital losses is subject to limitations.

Any gain or loss that you recognize on a disposition of our ordinary shares generally will be treated as U.S.-source income or loss for foreign tax credit limitation purposes. You should consult your own tax advisors regarding the proper treatment of gain or loss, as well as the availability of a foreign tax credit, in your particular circumstances.

Passive Foreign Investment Company

Based on the current and anticipated value of our assets and the composition of our income and assets, we do not expect to be treated as a passive foreign investment company, or PFIC, for U.S. federal income tax purposes for our current taxable year ending December 31, 2015; however, there can be no assurance that we will not be considered a PFIC for any taxable year. The determination of PFIC status is based on an annual determination that cannot be made until the close of a taxable year, involves extensive factual investigation, including ascertaining the fair market value of all of our assets on a quarterly basis and the character of each item of income that we earn, and is subject to uncertainty in several respects. Moreover, our ability to earn specific types of income that we currently treat as non-passive for purposes of the PFIC rules is uncertain with respect to future years. Accordingly, we cannot assure you that we will not be treated as a PFIC for our current taxable year ending December 31, 2015, or for any future taxable year or that the IRS will not take a contrary position. Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., our U.S. tax counsel, therefore expresses no opinion with respect to our PFIC status for any taxable year or our expectations relating to such status set forth in this paragraph.

A non-U.S. corporation will be treated as a PFIC for U.S. federal income tax purposes for any taxable year if, applying applicable look-through rules, either:

- at least 75% of its gross income for such year is passive income; or
- at least 50% of the value of its assets (determined based on a quarterly average) during such year is attributable to assets that produce or are held for the production of passive income.

For these purposes, we will be treated as owning a proportionate share of the assets and earning a proportionate share of the income of any other corporation in which we own, directly or indirectly, at least 25% by value of the stock or shares. Subject to various exceptions, passive income generally includes dividends, interest, capital gains, royalties and rents (other than certain royalties and rents derived in the active conduct of a trade or business and not derived from a related person).

We must make a separate determination each year as to whether we are a PFIC. As a result, our PFIC status may change. Because PFIC status must be determined annually based on tests which are factual in nature, our PFIC status in future years will depend on our income, assets and activities in those years. Furthermore, because the value of our gross assets is likely to be determined in large part by reference to our market capitalization and the value of our goodwill, a decline in the value of our shares could affect the determination of whether we are a PFIC. There can be no assurance that we will not be considered a PFIC for any taxable year. If we are a PFIC for any taxable year during which you hold ordinary shares, we generally will continue to be treated as a PFIC for all succeeding years during which you hold the ordinary shares. However, if we cease to be a PFIC, you may avoid some of the adverse effects of the PFIC regime by making a “deemed sale” election with respect to the ordinary shares, as applicable.

If we are or become a PFIC in a taxable year in which we pay a dividend or the prior taxable year, the preferential tax rates discussed above with respect to dividends paid to non-corporate U.S. Holders would not apply. In addition, if we are a PFIC for any taxable year during which you hold ordinary shares, in the absence of a “qualifying electing fund” election (which, as noted below, will not be available to you), you will be subject to special tax rules with respect to any “excess distribution” that you receive and any gain you realize from a sale or other disposition (including, under certain circumstances, a pledge) of the ordinary shares, unless you make a “mark-to-market” election as discussed below. Distributions you receive in a taxable year that are greater than 125% of the average annual distributions you received during the shorter of the three preceding taxable years or your holding period for the ordinary shares will be treated as an excess distribution. Under these special tax rules:

- the excess distribution or gain will be allocated ratably over your holding period for the ordinary shares,
- the amount allocated to the current taxable year, and any taxable year prior to the first taxable year in which we became a PFIC, will be treated as ordinary income, and
- the amount allocated to each other year will be subject to the highest tax rate in effect for individuals or corporations, as appropriate, for that year and the interest charge generally applicable to underpayments of tax will be imposed on the resulting tax attributable to each such year.

The tax liability for amounts allocated to years prior to the year of disposition or “excess distribution” cannot be offset by any net operating losses for such years, and gains (but not losses) realized on the sale of the ordinary shares cannot be treated as capital, even if you hold the ordinary shares as capital assets.

If we are treated as a PFIC with respect to you for any taxable year, to the extent any of our subsidiaries are also PFICs, you will be deemed to own shares in such lower-tier PFICs that are directly or indirectly owned by us in the proportion that the value of the ordinary shares you own bears to the value of all of our ordinary shares, and you may be subject to the rules described in the preceding paragraphs with respect to the shares of such lower-tier PFICs you are deemed to own. You should consult your own tax advisor regarding the application of the PFIC rules to any of our subsidiaries.

In certain circumstances, a U.S. Holder of shares in a PFIC may avoid the adverse tax consequences described above by making a “qualified electing fund” election to include in income its pro rata share of the corporation’s income on a current basis. However, you may make a qualified electing fund election with respect to your ordinary shares only if we

agree to furnish you annually with a PFIC annual information statement as specified in the applicable Treasury regulations. We currently do not intend to prepare or provide the information that would enable you to make a qualified electing fund election.

Alternatively, a U.S. Holder of "marketable stock" (as defined below) in a PFIC may make a mark-to-market election with respect to such stock to elect out of the tax treatment discussed above. If you make a valid mark-to-market election for the ordinary shares you will include in income each year an amount equal to the excess, if any, of the fair market value of the ordinary shares as of the close of your taxable year over your adjusted basis in such ordinary shares. You are allowed a deduction for the excess, if any, of the adjusted basis of the ordinary shares over their fair market value as of the close of the taxable year. However, deductions are allowable only to the extent of any net mark-to-market gains on the ordinary shares included in your income for prior taxable years. Amounts included in your income under a mark-to-market election, as well as gain on the actual sale or other disposition of the ordinary shares, are treated as ordinary income. Ordinary loss treatment also applies to the deductible portion of any mark-to-market loss on the ordinary shares, as well as to any loss realized on the actual sale or disposition of the ordinary shares, to the extent that the amount of such loss does not exceed the net mark-to-market gains previously included for such ordinary shares. Your basis in the ordinary shares will be adjusted to reflect any such income or loss amounts. If you make such an election, the tax rules that apply to distributions by corporations that are not PFICs would apply to distributions by us, except that the preferential tax rate discussed above under "—Dividends and Other Distributions" would not apply. U.S. Holders should consult their tax advisers regarding the availability and advisability of making a mark-to-market election in their particular circumstances.

The mark-to-market election is available only for "marketable stock," which is stock that is traded in other than *de minimis* quantities on at least 15 days during each calendar quarter "regularly traded" on a qualified exchange or other market, as defined in applicable U.S. Treasury regulations. The NASDAQ Global Market is a qualified exchange. We anticipate that our ordinary shares will be regularly traded on the NASDAQ Global Market, and therefore, in 2015 and any subsequent year in which our ordinary shares continue to be regularly traded, the mark-to-market election would be available to a holder of our ordinary shares if we become a PFIC. If any of our subsidiaries are or become PFICs, the mark-to-market election will not be available with respect to the shares of such subsidiaries that are treated as owned by you. Consequently, you could be subject to the PFIC rules with respect to income of the lower-tier PFICs the value of which already had been taken into account indirectly via mark-to-market adjustments.

If you hold ordinary shares in any year in which we are a PFIC, you will also be subject to annual information reporting requirements.

The PFIC rules are complex, and you should consult your own tax advisors regarding the application of the PFIC rules to your investment in our ordinary shares and the availability, application and consequences of the elections discussed above.

Information Reporting and Backup Withholding

Unless an exception applies, information reporting to the IRS generally will be required with respect to payments on the ordinary shares and proceeds of the sale of the ordinary shares paid to U.S. Holders, other than corporations and other exempt recipients. Backup withholding, currently at the rate of 28%, may apply to those payments if such a holder fails to provide a taxpayer identification number to the paying agent and to certify that no loss of exemption from backup withholding has occurred. The amounts withheld under the backup withholding rules are not an additional tax and may be refunded, or credited against the holder's U.S. federal income tax liability, if any, provided the required information is furnished to the IRS.

In addition, certain U.S. Holders who are individuals that hold certain foreign financial assets (which may include the ordinary shares), or who have a beneficial interest in or signatory authority over certain foreign financial accounts, are required to report information relating to such assets or accounts, subject to certain exceptions.

You should consult your own tax advisor regarding the application of the information reporting and backup withholding requirements to your particular situation.

Medicare Tax

Certain U.S. Holders that are individuals, estates or trusts are required to pay up to an additional 3.8% tax on, among other things, interest, dividends and gains from the sale or other disposition of capital assets. Special rules apply and certain elections are available for certain U.S. Holders that are subject to the 3.8% tax on net investment income and hold shares in a PFIC. Each U.S. Holder that is an individual, estate or trust should consult its own tax advisors regarding the effect, if any, of this tax provision on their ownership and disposition of ordinary shares.

Information with Respect to Foreign Financial Assets

Certain U.S. Holders may be required to report information relating to an interest in our ordinary shares, subject to certain exceptions (including an exception for ordinary shares held in accounts maintained by certain U.S. financial institutions). U.S. Holders should consult their tax advisers regarding the effect, if any, of this requirement on their ownership and disposition of the ordinary shares.

Transfer Reporting Requirements

A U.S. Holder (including a U.S. tax-exempt entity) that acquires equity of a non-U.S. corporation may be required to file a Form 926 or a similar form with the IRS under certain circumstances. Penalties may be imposed upon a U.S. Holder that fails to comply with the reporting requirements. U.S. Holders should consult their tax advisers regarding the applicability of this requirement to the acquisition or disposition of the ordinary shares.

Disclosure of Reportable Transactions

If a U.S. Holder sells or disposes of the ordinary shares at a loss or otherwise incurs certain losses that meet certain thresholds, such U.S. Holder may be required to file a disclosure statement with the IRS. Failure to comply with these and other reporting requirements could result in the imposition of significant penalties.

POTENTIAL PURCHASERS OF OUR ORDINARY SHARES ARE URGED TO CONSULT THEIR OWN TAX ADVISORS TO DETERMINE THE U.S. FEDERAL, STATE, LOCAL, AND NON-U.S. INCOME, GIFT, ESTATE OR GENERATION-SKIPPING TRANSFER, AND OTHER TAX AND TAX TREATY CONSIDERATIONS OF PURCHASING, OWNING AND DISPOSING OF OUR ORDINARY SHARES.

Material Singapore Tax Considerations

The following discussion is a summary of material Singapore income tax, stamp duty and estate duty considerations relevant to the purchase, ownership and disposition of our ordinary shares by an investor who is not tax resident or domiciled in Singapore and who does not carry on business or otherwise have a presence in Singapore. The statements made herein regarding taxation are based on certain aspects of the tax laws of Singapore and administrative guidelines issued by the relevant authorities in force as of the date hereof and are subject to any changes in such laws or administrative guidelines, or in the interpretation of those laws or guidelines, occurring after such date, which changes could be made on a retroactive basis. The statements made herein do not describe all of the tax considerations that may be relevant to all our shareholders, some of which (such as dealers in securities) may be subject to different rules. The statements are not intended to be and do not constitute legal or tax advice and no assurance can be given that courts or fiscal authorities responsible for the administration of such laws will agree with the interpretation adopted therein. Each prospective investor should consult an independent tax advisor regarding all Singapore income and other tax consequences applicable to them from owning or disposing of our ordinary shares in light of the investor's particular circumstances.

Income Taxation Under Singapore Law

Dividend Distributions with Respect to Ordinary Shares

Singapore has a one-tier corporate income tax system. Under the one-tier corporate income tax system, the tax paid by a company that is tax resident in Singapore is a final tax. Any dividends paid by a company that is tax resident in Singapore are exempt from Singapore income tax in the hands of the company's shareholders. As our company will be a tax resident of Singapore, the dividends payable by our company will be one-tier tax-exempt dividends and will be exempt from Singapore income tax in the hands of our shareholders, regardless of their legal form or tax residence status. There will be no tax credits attached to the dividends payable by our company. There is no withholding tax on payment of dividends to non-resident shareholders.

Capital Gains upon Disposition of Ordinary Shares

Under current Singapore tax law, there is no tax on capital gains. As such, any profits from the disposal of our ordinary shares would not ordinarily be taxable in Singapore. However, if the gains from the disposal of ordinary shares are construed to be of an income nature (which could be the case if, for instance, the gains arise from carrying on a trade or business in Singapore), the disposal profits would be taxable as income rather than capital gains.

In addition, shareholders who apply, or who are required to apply, the Singapore Financial Reporting Standard 39 Financial Instruments—Recognition and Measurement, or FRS-39, for the purposes of Singapore income tax may be required to recognize gains or losses (not being gains or losses in the nature of capital) in accordance with the provisions of FRS 39 (as modified by the applicable provisions of Singapore income tax law) even though no sale or disposal of our ordinary shares is made. Singapore corporate shareholders who may be subject to such tax treatment should consult their own accounting and tax advisers regarding the Singapore income tax consequences of their acquisition, holding and disposal of our ordinary shares.

Stamp Duty

There is no Singapore stamp duty payable in respect of the issuance or holding of our ordinary shares. Singapore stamp duty will be payable if there is an instrument of transfer executed in Singapore or if there is an instrument of transfer executed outside of Singapore which is received in Singapore. Under Singapore law, stamp duty is not applicable to electronic transfers of our shares effected on a book entry basis. We therefore expect that no Singapore stamp duty will be payable in respect of ordinary shares purchased by U.S. holders in this offering assuming that they are acquired in book entry form through the facility established by our transfer agent and registrar. Where shares evidenced in certificated form are transferred and an instrument of transfer is executed between the parties, Singapore stamp duty is payable on an instrument of transfer of the shares at the rate of 0.2% of the consideration for, or market value of, the transferred shares, whichever is higher. The Singapore stamp duty is borne by the purchaser unless there is an agreement to the contrary. Where the instrument of transfer is executed outside of Singapore, Singapore stamp duty must be paid within 30 days of receipt in Singapore if the instrument of transfer is received in Singapore.

Estate Duty

Singapore estate duty has been abolished with effect from February 15, 2008 in relation to the estate of any person whose death has occurred on or after February 15, 2008.

Tax Treaties Regarding Withholding Taxes

There is no comprehensive avoidance of double taxation agreement between the United States and Singapore which applies to withholding taxes on dividends or capital gains.

UNDERWRITING

Subject to the terms and conditions set forth in the underwriting agreement, dated as of , 2015, between us and Jefferies LLC and Leerink Partners LLC, as the representative of the underwriters named below, we have agreed to sell to the underwriters, and each of the underwriters has agreed, severally and not jointly, to purchase from us, the respective number of ordinary shares shown opposite its name below:

Underwriter	Number of Ordinary Shares
Jefferies LLC	
Leerink Partners LLC	
Total	

The underwriting agreement provides that the obligations of the several underwriters are subject to certain conditions precedent such as the receipt by the underwriters of officers' certificates and legal opinions and approval of certain legal matters by their counsel. The underwriting agreement provides that the underwriters will purchase all of the ordinary shares if any of them are purchased. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the nondefaulting underwriters may be increased or the underwriting agreement may be terminated. We have agreed to indemnify the underwriters and certain of their controlling persons against certain liabilities, including liabilities under the Securities Act, and to contribute to payments that the underwriters may be required to make in respect of those liabilities.

The underwriters have advised us that, following the pricing of this offering, they currently intend to make a market in our ordinary shares as permitted by applicable laws and regulations. However, the underwriters are not obligated to do so, and the underwriters may discontinue any market-making activities at any time without notice in their sole discretion. Accordingly, no assurance can be given as to the liquidity of the trading market for our ordinary shares, that you will be able to sell any of our ordinary shares held by you at a particular time or that the prices that you receive when you sell will be favorable.

The underwriters are offering the ordinary shares subject to their acceptance of the ordinary shares from us and subject to prior sale. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part. In addition, the underwriters have advised us that they do not intend to confirm sales to any account over which they exercise discretionary authority.

Certain of our existing shareholders and their affiliated entities, including affiliates of our directors, have indicated an interest in purchasing up to an aggregate of approximately $ million of our ordinary shares in this offering at the initial public offering price. However, because indications of interest are not binding agreements or commitments to purchase, the underwriters could determine to sell more, less or no shares to any of these existing shareholders and their affiliated entities and any of these existing shareholders and affiliated entities could determine to purchase more, less or no shares in this offering.

Commission and Expenses

The underwriters have advised us that they propose to offer the ordinary shares to the public at the initial public offering price set forth on the cover page of this prospectus and to certain dealers, which may include the underwriters, at that price less a concession not in excess of $ per ordinary share. After the offering, the initial public offering price, concession and reallowance to dealers may be reduced by the representatives. No such reduction will change the amount of proceeds to be received by us as set forth on the cover page of this prospectus.

The following table shows the public offering price, the underwriting discounts and commissions that we are to pay the underwriters and the proceeds, before expenses, to us in connection with this offering. Such amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase additional ordinary shares in this offering.

	Per Share		Total	
	Without Option to Purchase Additional Shares	With Option to Purchase Additional Shares	Without Option to Purchase Additional Shares	With Option to Purchase Additional Shares
Public offering price	$	$	$	$
Underwriting discounts and commissions paid by us	$	$	$	$
Proceeds to us, before expenses	$	$	$	$

We estimate expenses payable by us in connection with this offering, other than the underwriting discounts and commissions referred to above, will be approximately $. We have also agreed to reimburse the underwriters for certain of their expenses incurred in connection with review by the Financial Industry Regulatory Authority, Inc. of the terms of this offering in an amount not to exceed $.

Determination of Offering Price

Prior to this offering, there has not been a public market for our ordinary shares. Consequently, the initial public offering price for our ordinary shares will be determined by negotiations between us and the underwriters. Among the factors to be considered in these negotiations will be prevailing market conditions, our financial information, market valuations of other companies that we and the underwriters believe to be comparable to us, estimates of our business potential, the present state of our development and other factors deemed relevant.

We offer no assurances that the initial public offering price will correspond to the price at which our ordinary shares will trade in the public market subsequent to the offering or that an active trading market for our ordinary shares will develop and continue after the offering.

Listing

We have applied to list our ordinary shares on the NASDAQ Global Market under the trading symbol "WVE."

Stamp Taxes

If you purchase ordinary shares offered in this prospectus, you may be required to pay stamp taxes and other charges under the laws and practices of the country of purchase, in addition to the offering price listed on the cover page of this prospectus.

Option to Purchase Additional Shares

We have granted the underwriters an option, exercisable for 30 days from the date of this prospectus, to purchase, from time to time, in whole or in part, up to an aggregate of ordinary shares from us at the public offering price set forth on the cover page of this prospectus, less underwriting discounts and commissions. If the underwriters exercise this option, each underwriter will be obligated, subject to specified conditions, to purchase a number of additional shares proportionate to that underwriter's initial purchase commitment as indicated in the table above.

No Sales of Similar Securities

We, our officers, directors and holders of all or substantially all our outstanding share capital and other securities have agreed, subject to specified exceptions, not to directly or indirectly:

- sell, offer to sell, contract to sell or lend, effect any short sale or establish or increase an open "put equivalent position" within the meaning of Rule 16a-1(h) under the Securities Exchange Act of 1934, as

amended, pledge, hypothecate or grant any security interest in, or in any other way transfer or dispose of, directly or indirectly, any ordinary shares or any other securities convertible into or exercisable or exchangeable for ordinary shares;

- enter into any swap, hedge or similar arrangement or agreement that transfers, in whole or in part, the economic risk of ownership of the ordinary shares or any other securities convertible or exercisable or exchangeable for ordinary shares;
- regardless of whether any such transaction is to be settled in securities, in cash or otherwise; or
- publicly announce an intention to do any of the foregoing for a period of 180 days after the date of this prospectus without the prior written consent of the representatives.

This restriction terminates after the close of trading of our ordinary shares on and including the 180th day after the date of this prospectus.

The representatives may in their sole discretion and at any time or from time to time before the termination of the 180-day period release all or any portion of the securities subject to lock-up agreements. There are no existing agreements between the underwriters and our shareholders who will execute a lock-up agreement, providing consent to the sale of shares prior to the expiration of the lock-up period.

Stabilization

The underwriters have advised us that, pursuant to Regulation M under the Securities Exchange Act of 1934, as amended, they may engage in short sale transactions, stabilizing transactions, syndicate covering transactions or the imposition of penalty bids in connection with this offering. These activities may have the effect of stabilizing or maintaining the market price of our ordinary shares at a level above that which might otherwise prevail in the open market. Establishing short sales positions may involve either “covered” short sales or “naked” short sales.

“Covered” short sales are sales made in an amount not greater than the underwriters’ option to purchase additional ordinary shares in this offering. The underwriters may close out any covered short position by either exercising their option to purchase additional ordinary shares or purchasing our ordinary shares in the open market. In determining the source of shares to close out the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the option to purchase additional shares.

“Naked” short sales are sales in excess of the option to purchase additional ordinary shares. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of our ordinary shares in the open market after pricing that could adversely affect investors who purchase in this offering.

A stabilizing bid is a bid for the purchase of ordinary shares on behalf of the underwriters for the purpose of fixing or maintaining the price of our ordinary shares. A syndicate covering transaction is the bid for or the purchase of ordinary shares on behalf of the underwriters to reduce a short position incurred by the underwriters in connection with the offering. Similar to other purchase transactions, the underwriters’ purchases to cover the syndicate short sales may have the effect of raising or maintaining the market price of our ordinary shares or preventing or retarding a decline in the market price of our ordinary shares. As a result, the price of our ordinary shares may be higher than the price that might otherwise exist in the open market. A penalty bid is an arrangement permitting the underwriters to reclaim the selling concession otherwise accruing to a syndicate member in connection with the offering if our ordinary shares originally sold by such syndicate member are purchased in a syndicate covering transaction and therefore have not been effectively placed by such syndicate member.

Neither we, nor any of the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our ordinary shares. The underwriters are not obligated to engage in these activities and, if commenced, any of the activities may be discontinued at any time.

Electronic Distribution

A prospectus in electronic format may be made available by e-mail or on the websites or through online services maintained by one or more of the underwriters or their affiliates. In those cases, prospective investors may view offering terms online and may be allowed to place orders online. The underwriters may agree with us to allocate a specific number of ordinary shares for sale to online brokerage account holders. Any such allocation for online distributions will be made by the underwriters on the same basis as other allocations. Other than the prospectus in electronic format, the information on the underwriters' web sites and any information contained in any other web site maintained by any of the underwriters is not part of this prospectus, has not been approved and/or endorsed by us or the underwriters and should not be relied upon by investors.

Other Activities and Relationships

The underwriters and certain of their respective affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities. The underwriters and certain of its affiliates have, from time to time, performed, and may in the future perform, various commercial and investment banking and financial advisory services for us and our affiliates, for which they received or will receive customary fees and expenses.

Leerink Partners LLC acted as a financial advisor to us in connection with our Series B preferred share financing, which we closed on August 14, 2015 and from which we received aggregate net proceeds of approximately $62.5 million. We compensated Leerink Partners LLC for their services as our financial advisor for this transaction. Leerink Partners LLC also acquired 20,000 of our Series B preferred shares through purchases by its related entities on the same terms as other investors.

In the ordinary course of their various business activities, the underwriters and certain of their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own accounts and for the accounts of their customers, and such investment and securities activities may involve securities and/or instruments issued by us and our affiliates. If the underwriters or their respective affiliates have a lending relationship with us, they routinely hedge their credit exposure to us consistent with their customary risk management policies. The underwriters and their respective affiliates may hedge such exposure by entering into transactions which consist of either the purchase of credit default swaps or the creation of short positions in our securities or the securities of our affiliates, including potentially our ordinary shares offered hereby. Any such short positions could adversely affect future trading prices of our ordinary shares offered hereby. The underwriters and certain of their respective affiliates may also communicate independent investment recommendations, market color or trading ideas and/or publish or express independent research views in respect of such securities or instruments and may at any time hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

Selling Restrictions

This prospectus does not constitute an offer to sell to, or a solicitation of an offer to buy from, anyone in any country or jurisdiction (i) in which such an offer or solicitation is not authorized, (ii) in which any person making such offer or solicitation is not qualified to do so or (iii) in which any such offer or solicitation would otherwise be unlawful. No action has been taken that would, or is intended to, permit a public offer of the ordinary shares or possession or distribution of this prospectus or any other offering or publicity material relating to the ordinary shares in any country or jurisdiction (other than the United States) where any such action for that purpose is required. Accordingly, each underwriter has undertaken that it will not, directly or indirectly, offer or sell any ordinary shares or have in its possession, distribute or publish any prospectus, form of application, advertisement or other document or information in any country or jurisdiction except under circumstances that will, to the best of its knowledge and belief, result in compliance with any applicable laws and regulations and all offers and sales of the ordinary shares by it will be made on the same terms.

European Economic Area

In relation to each member state of the European Economic Area which has implemented the Prospectus Directive (each, a Relevant Member State), an offer to the public of any ordinary shares which are the subject of the offering contemplated by this prospectus supplement and the accompanying prospectus may not be made in that Relevant Member State except that an offer to the public in that Relevant Member State of any ordinary shares may be made at any time under the following exemptions under the Prospectus Directive, if they have been implemented in that Relevant Member State:

- to any legal entity which is a "qualified investor" as defined in the Prospectus Directive;
- to fewer than 100 or, if the Relevant Member State has implemented the relevant provision of the 2010 PD Amending Directive, 150, natural or legal persons (other than qualified investors as defined in the Prospectus Directive), as permitted under the Prospectus Directive, subject to obtaining the prior consent of the underwriters or the underwriters nominated by us for any such offer; or
- in any other circumstances falling within Article 3(2) of the Prospectus Directive,

provided that no such offer of ordinary shares shall require us or any of the underwriters to publish a prospectus pursuant to Article 3 of the Prospectus Directive or supplement a prospectus pursuant to Article 16 of the Prospectus Directive.

For the purposes of this provision, the expression an "offer ordinary shares to the public" in relation to the ordinary shares in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the ordinary shares to be offered so as to enable an investor to decide to purchase or subscribe to the ordinary shares, as the same may be varied in that Relevant Member State by any measure implementing the Prospectus Directive in that Relevant Member State and the expression "Prospectus Directive" means Directive 2003/71/EC (and amendments thereto, including the 2010 PD Amending Directive, to the extent implemented in the Relevant Member State), and includes any relevant implementing measure in the Relevant Member State and the expression "2010 PD Amending Directive" means Directive 2010/73/EU.

United Kingdom

This prospectus is only being distributed to, and is only directed at, persons in the United Kingdom that are qualified investors within the meaning of Article 2(1)(e) of the Prospectus Directive that are also (i) investment professionals falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended (the "Order") and/or (ii) high net worth entities falling within Article 49(2)(a) to (d) of the Order and other persons to whom it may lawfully be communicated (each such person being referred to as a "relevant person").

This prospectus and its contents are confidential and should not be distributed, published or reproduced (in whole or in part) or disclosed by recipients to any other persons in the United Kingdom. Any person in the United Kingdom that is not a relevant person should not act or rely on this document or any of its contents.

Bermuda

Securities may be offered or sold in Bermuda only in compliance with the provisions of the Investment Business Act 2003 of Bermuda which regulates the sale of securities in Bermuda and it is not intended for any offer or sale of shares to the public to take place in Bermuda.

Australia

This prospectus is not a disclosure document for the purposes of Australia's Corporations Act 2001 (Cth) of Australia, or Corporations Act, has not been lodged with the Australian Securities & Investments Commission and is only directed to the categories of exempt persons set out below. Accordingly, if you receive this prospectus in Australia:

You confirm and warrant that you are either:

- a "sophisticated investor" under section 708(8)(a) or (b) of the Corporations Act;
- a "sophisticated investor" under section 708(8)(c) or (d) of the Corporations Act and that you have provided an accountant's certificate to the company which complies with the requirements of section 708(8)(c)(i) or (ii) of the Corporations Act and related regulations before the offer has been made;

- a person associated with the company under Section 708(12) of the Corporations Act; or
- a "professional investor" within the meaning of section 708(11)(a) or (b) of the Corporations Act.

To the extent that you are unable to confirm or warrant that you are an exempt sophisticated investor, associated person or professional investor under the Corporations Act any offer made to you under this prospectus is void and incapable of acceptance.

You warrant and agree that you will not offer any of the securities issued to you pursuant to this prospectus for resale in Australia within 12 months of those securities being issued unless any such resale offer is exempt from the requirement to issue a disclosure document under section 708 of the Corporations Act.

Hong Kong

No securities have been offered or sold, and no securities may be offered or sold, in Hong Kong, by means of any document, other than to persons whose ordinary business is to buy or sell shares or debentures, whether as principal or agent; or to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong, or SFO, and any rules made under that Ordinance; or in other circumstances which do not result in the document being a "prospectus" as defined in the Companies Ordinance (Cap. 32) of Hong Kong ("CO") or which do not constitute an offer or invitation to the public for the purpose of the CO or the SFO. No document, invitation or advertisement relating to the securities has been issued or may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted under the securities laws of Hong Kong) other than with respect to securities which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the SFO and any rules made under that Ordinance.

This prospectus has not been registered with the Registrar of Companies in Hong Kong. Accordingly, this prospectus may not be issued, circulated or distributed in Hong Kong, and the securities may not be offered for subscription to members of the public in Hong Kong. Each person acquiring the securities will be required, and is deemed by the acquisition of the securities, to confirm that he is aware of the restriction on offers of the securities described in this prospectus and the relevant offering documents and that he is not acquiring, and has not been offered any securities in circumstances that contravene any such restrictions.

Japan

The offering has not been and will not be registered under the Financial Instruments and Exchange Law of Japan (Law No. 25 of 1948 of Japan, as amended), or FIEL, and the initial purchaser will not offer or sell any securities, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to others for re-offering or resale, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the FIEL and any other applicable laws, regulations and ministerial guidelines of Japan.

Singapore

This prospectus has not been and will not be lodged or registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the ordinary shares may not be circulated or distributed, nor may the ordinary shares be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore (the "SFA"), (ii) to a relevant person pursuant to Section 275(1), or any person pursuant to Section 275(1A), and in accordance with the conditions specified in Section 275, of the SFA, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Subject to Section 276(7) of the SFA and Regulation 32 of the Securities and Futures (Offers of Investments) (Shares and Debentures) Regulations 2005 of Singapore, where the ordinary shares are subscribed or purchased under Section 275 of the SFA by a relevant person which is a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor, securities (as defined in

Section 239(1) of the SFA) of that corporation shall not be transferred within six months after that corporation has acquired any securities pursuant to an offer made in reliance on an exemption under Section 275 of the SFA unless:

- such transfer is made only to an institutional investor or to a relevant person defined in Section 275(2) of the SFA, or arises from an offer referred to in Section 275(1A) of the SFA;
- no consideration is or will be given for the transfer; or
- the transfer is by operation of law.

Subject to Section 276(7) of the SFA and Regulation 32 of the Securities and Futures (Offers of Investments) (Shares and Debentures) Regulations 2005 of Singapore, where the ordinary shares are subscribed or purchased under Section 275 of the SFA by a relevant person which is a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor, the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that trust has acquired the securities pursuant to an offer made under Section 275 of the SFA unless:

- such transfer is made only to an institutional investor or to a relevant person defined in Section 275(2) of the SFA, or arises from an offer that is made on terms that such rights or interest are acquired at a consideration of not less than S$200,000 (or its equivalent foreign currency) for each transaction, whether such amount is to be paid for in cash or by exchange of securities or other assets;
- no consideration is or will be given for the transfer; or
- the transfer is by operation of law.

Switzerland

The ordinary shares may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange, or SIX, or on any other stock exchange or regulated trading facility in Switzerland. This document has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a of the CO or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this prospectus nor any other offering or marketing relating to the ordinary shares or this offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this document nor any other offering or marketing material relating to this offering, the company or the ordinary shares has been or will be filed with or approved by any Swiss regulatory authority.

Canada

The offering of our ordinary shares in Canada is being made on a private placement basis in reliance on exemptions from the prospectus requirements under the securities laws of each applicable Canadian province and territory where the ordinary shares may be offered and sold, and therein may only be made with investors that are purchasing as principal and that qualify as both an "accredited investor" as such term is defined in National Instrument 45-106 Prospectus and Registration Exemptions and as a "permitted client" as such term is defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligation. Any offer and sale of our ordinary shares in any province or territory of Canada may only be made through a dealer that is properly registered under the securities legislation of the applicable province or territory wherein our ordinary shares are offered and/or sold or, alternatively, by a dealer that qualifies under and is relying upon an exemption from the registration requirements therein.

Any resale of our ordinary shares by an investor resident in Canada must be made in accordance with applicable Canadian securities laws, which may require resales to be made in accordance with prospectus and registration requirements, statutory exemptions from the prospectus and registration requirements or under a discretionary exemption from the prospectus and registration requirements granted by the applicable Canadian securities regulatory authority. These resale restrictions may under certain circumstances apply to resales of our ordinary shares outside of Canada.

Upon receipt of this document, each Canadian investor hereby confirms that it has expressly requested that all documents evidencing or relating in any way to the sale of the securities described herein (including for greater certainty any purchase confirmation or any notice) be drawn up in the English language only. *Par la réception de ce document, chaque investisseur canadien confirme par les présentes qu'il a expressément exigé que tous les documents faisant foi ou se rapportant de quelque manière que ce soit à la vente des valeurs mobilières décrites aux présentes (incluant, pour plus de certitude, toute confirmation d'achat ou tout avis) soient rédigés en anglais seulement.*

LEGAL MATTERS

The validity of the ordinary shares offered pursuant to this prospectus and certain other matters of Singapore law will be passed upon for us by Camford Law Corporation, Singapore. Selected legal matters as to U.S. law in connection with this offering will be passed upon for us by Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., Boston, Massachusetts. Select intellectual property matters will be passed upon for us by Choate Hall & Stewart LLP, Boston, Massachusetts. The underwriters are being represented by Cooley LLP, Boston, Massachusetts.

EXPERTS

The consolidated financial statements of WAVE Life Sciences Pte. Ltd. as of December 31, 2013 and 2014, and for the years then ended, have been included herein in reliance upon the report of KPMG LLP, independent registered public accounting firm, appearing elsewhere herein, and upon the authority of KPMG LLP as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed a registration statement on Form S-1 with the SEC with respect to our ordinary shares being offered by this prospectus. This prospectus is a part of and does not contain all of the information set forth in the registration statement and the exhibits and schedules to the registration statement. For further information with respect to us and our ordinary shares, please refer to the registration statement, including its exhibits and schedules. Statements made in this prospectus relating to any contract or other document are not necessarily complete and you should refer to the exhibits attached to the registration statement for copies of the actual contract or document. You may read and copy all materials that we file with the SEC, including the registration statement and its exhibits and schedules, at the SEC's public reference room, located at 100 F Street, N.E., Washington, D.C. 20549, as well as on the website maintained by the SEC at www.sec.gov. Please call the SEC at 1-800-SEC-0330 for more information on the public reference room. Information contained on any website referenced in this prospectus does not and will not constitute a part of this prospectus or the registration statement on Form S-1 of which this prospectus is a part.

In addition, upon the closing of this offering, we will be subject to the information reporting requirements of the Exchange Act, and we will file periodic reports and other information with the SEC. These reports, proxy statements and other information will be available for inspection and copying at the public reference room and website of the SEC referred to above. We also maintain a website at www.wavelifesciences.com, at which you may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. The information contained in, or that can be accessed through, our website is not part of, and is not incorporated into, this prospectus. Additionally, you may request a copy of any of our filings with the SEC at no cost, by writing or telephoning us at the following address:

WAVE Life Sciences Pte. Ltd.
8 Cross Street #10-00
PWC Building
Singapore 048424

You should rely only on the information contained in this prospectus or to which we have referred you. We have not and the underwriters have not authorized any person to provide you with different information or to make any representation not contained in this prospectus.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Shareholders
WAVE Life Sciences Pte. Ltd.:

We have audited the accompanying consolidated balance sheets of WAVE Life Sciences Pte. Ltd. and subsidiaries as of December 31, 2013 and 2014, and the related consolidated statements of operations, comprehensive loss, shareholders' (deficit) equity, and cash flows for the years then ended. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of WAVE Life Sciences Pte. Ltd. and subsidiaries as of December 31, 2013 and 2014, and the results of their operations and their cash flows for the years then ended, in conformity with U.S. generally accepted accounting principles.

/s/ KPMG LLP

Cambridge, Massachusetts
September 4, 2015

WAVE LIFE SCIENCES PTE. LTD.

CONSOLIDATED BALANCE SHEETS
(in thousands, except share and per share amounts)

	December 31, 2013	December 31, 2014	June 30, 2015 (unaudited)
Assets			
Current assets:			
Cash	$ 439	$ 1,048	$ 7,779
Accounts receivable	95	200	—
Prepaid expenses and other current assets	75	103	114
Deferred tax assets	170	64	64
Deferred offering costs	—	72	669
Total current assets	779	1,487	8,626
Property and equipment, net	1,384	1,269	1,832
Deferred tax assets	160	182	83
Restricted cash	—	—	1,055
Total assets	$ 2,323	$ 2,938	$ 11,596
Liabilities and shareholders' (deficit) equity			
Current liabilities:			
Related party notes payable	$ 9,602	$ —	$ —
Accounts payable	176	125	2,057
Accrued expenses and other current liabilities	271	605	373
Deferred revenue	—	152	—
Current portion of capital lease obligation	—	—	62
Total current liabilities	10,049	882	2,492
Long-term liabilities:			
Capital lease obligation, net of current portion	—	—	109
Other liabilities	36	29	32
Total long-term liabilities	36	29	141
Total liabilities	$ 10,085	$ 911	$ 2,633
Commitments and Contingencies (Note 9)			
Shareholders' (deficit) equity:			
Series A preferred shares, no par value; 380,100, 965,300 and 965,300 shares issued and outstanding at December 31, 2013, December 31, 2014 and June 30, 2015, (unaudited), respectively	2,022	7,874	7,874
Ordinary shares, no par value; 119,900, 1,054,900 and 2,282,123 shares issued and outstanding at December 31, 2013, December 31, 2014 and June 30, 2015, (unaudited), respectively	638	9,973	22,446
Additional paid-in capital	—	—	1,650
Accumulated other comprehensive income	225	56	34
Accumulated deficit	(10,647)	(15,876)	(23,041)
Total shareholders' (deficit) equity	(7,762)	2,027	8,963
Total liabilities and shareholders' equity	$ 2,323	$ 2,938	$ 11,596

The accompanying notes are an integral part of the consolidated financial statements.

WAVE LIFE SCIENCES PTE. LTD.

CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except share and per share amounts)

	Year Ended December 31,		Six Months Ended June 30,	
	2013	2014	2014	2015
			(unaudited)	
Revenue	$ —	$ —	$ —	$ 152
Operating expenses:				
Research and development	1,920	2,395	1,087	3,457
General and administrative	1,654	2,999	1,173	3,789
Total operating expenses	3,574	5,394	2,260	7,246
Loss from operations	(3,574)	(5,394)	(2,260)	(7,094)
Other (expense) income:				
Interest expense	(111)	(12)	(12)	(15)
Other, net	37	261	215	43
Total other (expense) income	(74)	249	203	28
Loss before income taxes	(3,648)	(5,145)	(2,057)	(7,066)
Income tax benefit (provision)	330	(84)	(60)	(99)
Net loss	$ (3,318)	$ (5,229)	$ (2,117)	$ (7,165)
Net loss per share attributable to ordinary shareholders—basic and diluted	$ (7.69)	$ (5.40)	$ (2.41)	$ (3.32)
Weighted-average ordinary shares used in computing net loss per share attributable to ordinary shareholders—basic and diluted	431,270	967,894	879,265	2,159,811

The accompanying notes are an integral part of the consolidated financial statements.

WAVE LIFE SCIENCES PTE. LTD.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
(in thousands)

	Year Ended December 31,		Six Months Ended June 30,	
	2013	2014	2014	2015
			(unaudited)	
Net loss	$(3,318)	$(5,229)	$(2,117)	$(7,165)
Other comprehensive income (loss):				
Foreign currency translation	135	(169)	(86)	(22)
Comprehensive loss	$(3,183)	$(5,398)	$(2,203)	$(7,187)

The accompanying notes are an integral part of the consolidated financial statements.

WAVE LIFE SCIENCES PTE. LTD.

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' (DEFICIT) EQUITY
(in thousands, except share amounts)

	Series A Preferred Shares		Ordinary Shares		Additional Paid-in Capital	Accumulated Other Comprehensive Income	Accumulated Deficit	Total Shareholders' (Deficit) Equity
	Shares	Amount	Shares	Amount				
Balance at December 31, 2012	—	$ —	500,000	$ 2,660	$ —	$ 90	$ (7,329)	$ (4,579)
Conversion of ordinary shares to Series A preferred shares	380,100	2,022	(380,100)	(2,022)	—	—	—	—
Other comprehensive income	—	—	—	—	—	135	—	135
Net loss	—	—	—	—	—	—	(3,318)	(3,318)
Balance at December 31, 2013	380,100	2,022	119,900	638	—	225	(10,647)	(7,762)
Conversion of related party notes payable to ordinary shares and Series A preferred shares	585,200	5,852	375,000	3,750	—	—	—	9,602
Issuance of ordinary shares, net of offering costs of $15	—	—	560,000	5,585	—	—	—	5,585
Other comprehensive loss	—	—	—	—	—	(169)	—	(169)
Net loss	—	—	—	—	—	—	(5,229)	(5,229)
Balance at December 31, 2014	965,300	7,874	1,054,900	9,973	—	56	(15,876)	2,027
Share-based compensation, including issuance of ordinary shares to an employee (unaudited)	—	—	47,223	842	1,650	—	—	2,492
Issuance of ordinary shares, net of offering costs of $169 (unaudited)	—	—	1,180,000	11,631	—	—	—	11,631
Other comprehensive loss (unaudited)	—	—	—	—	—	(22)	—	(22)
Net loss (unaudited)	—	—	—	—	—	—	(7,165)	(7,165)
Balance at June 30, 2015 (unaudited)	965,300	$ 7,874	2,282,123	$ 22,446	$ 1,650	$ 34	$ (23,041)	$ 8,963

The accompanying notes are an integral part of the consolidated financial statements.

WAVE LIFE SCIENCES PTE. LTD.

CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Year Ended December 31,		Six Months Ended June 30,	
	2013	2014	2014	2015
			(unaudited)	
Operating Activities				
Net loss	$(3,318)	$(5,229)	$(2,117)	$ (7,165)
Adjustments to reconcile net loss to net cash used in operating activities:				
Depreciation and amortization	276	281	104	178
Share-based compensation expense	—	—	—	2,492
Deferred rent	(6)	(6)	(3)	(3)
Loss on disposal of property and equipment	—	14	7	—
Deferred income taxes	(330)	84	60	99
Changes in operating assets and liabilities:				
Accounts receivable	(102)	(129)	90	200
Prepaid expenses and other current assets	3	(12)	(10)	(18)
Accounts payable	(152)	9	(28)	1,713
Accrued expenses and other current liabilities	78	410	(103)	(355)
Deferred revenue	—	152	—	(152)
Net cash used in operating activities	(3,551)	(4,426)	(2,000)	(3,011)
Investing Activities				
Increase in restricted cash	—	—	—	(1,055)
Proceeds from government grant reimbursements for property and equipment	—	319	312	3
Proceeds from sale of property and equipment	—	14	—	—
Purchase of property and equipment	(47)	(590)	(517)	(378)
Net cash used in investing activities	(47)	(257)	(205)	(1,430)
Financing Activities				
Proceeds from related party notes payable	6,172	—	—	—
Repayment of related party notes payable	(2,500)	—	—	—
Proceeds from the issuance of ordinary shares, net of offering costs	—	5,585	5,585	11,631
Proceeds from government grant advances	—	34	34	112
Principal payments on capital lease obligation	—	—	—	(97)
Net cash provided by financing activities	3,672	5,619	5,619	11,646
Effect of foreign exchange rates on cash	(14)	(327)	(104)	(474)
Net increase in cash	60	609	3,310	6,731
Cash at beginning of period	379	439	439	1,048
Cash at end of period	$ 439	$ 1,048	$ 3,749	$ 7,779
Supplemental disclosure of cash flow information:				
Conversion of related party notes payable into ordinary and Series A preferred shares	$ —	$ 9,602	$ 9,602	$ —
Conversion of ordinary shares into Series A preferred shares	$ 2,022	$ —	$ —	$ —
Equipment acquired for capital lease obligation	$ —	$ —	$ —	$ 268
Deferred offering costs in accounts payable and accrued expenses	$ —	$ 72	$ —	$ 669
Property and equipment purchases in accounts payable	$ 50	$ 3	$ 1	$ 114

The accompanying notes are an integral part of the consolidated financial statements.

WAVE Life Sciences Pte. Ltd.

Notes to Consolidated Financial Statements
(in thousands, except for share and per share amounts)
(Information as of June 30, 2015 and for the six months ended June 30, 2014 and 2015 is unaudited)

1. THE COMPANY

Organization

WAVE Life Sciences Pte. Ltd. (together with its subsidiaries, "WAVE" or the "Company") is a preclinical biopharmaceutical company with an innovative and proprietary synthetic chemistry drug development platform that the Company is using to design, develop and commercialize a broad pipeline of first-in-class or best-in-class nucleic acid therapeutic candidates. The Company is initially developing nucleic acid therapeutics that target genetic defects to either reduce the expression of disease-promoting proteins or transform the production of dysfunctional mutant proteins into the production of functional proteins.

The Company was incorporated in Singapore on July 23, 2012 and has its principal office in Boston, Massachusetts. The Company was incorporated with the purpose of combining two commonly held companies, WAVE Life Sciences USA, Inc., ("WAVE USA"), a Delaware corporation (formerly Ontorii, Inc.), and WAVE Life Sciences (Japan), ("WAVE Japan"), a company organized under the laws of Japan (formerly Chiralgen., Ltd.), which occurred on September 12, 2012.

The Company was created through the combination of entities that were under the common control of Shin Nippon Biomedical Laboratories Ltd. ("SNBL") both prior to and immediately following the Company's incorporation. Since the entities represent the combination of entities under common control, generally accepted accounting principles in the United States ("U.S. GAAP") require the presentation of the combined companies as if they have always been combined entities. Therefore, on the date of incorporation, the Company recognized the assets and liabilities of WAVE USA and WAVE Japan at the carrying amounts of the assets and liabilities as recorded in the standalone financial statements of the respective companies on that date.

The Company's primary activities since inception have been conducting research and experimental development of biotechnology and chemicals, conducting preclinical testing, recruiting personnel, and raising capital to support development activities.

Liquidity

Since the Company's inception, WAVE has incurred significant operating losses and has had negative cash flows from operations. The Company's net loss was $5,229 for the year ended December 31, 2014, and $7,165 (unaudited) for the six months ended June 30, 2015. As of December 31, 2014 and June 30, 2015, the Company had an accumulated deficit of $15,876 and $23,041 (unaudited), respectively.

From the Company's inception through June 30, 2015, the Company has financed its operations primarily through private placements of promissory notes and ordinary shares. Since the Company's incorporation, through December 31, 2014 and June 30, 2015, the Company has received net proceeds of $15,187 and $26,818 (unaudited), respectively, from such transactions.

The Company had cash of $1,048 and $7,779 (unaudited) at December 31, 2014 and June 30, 2015, respectively. On August 14, 2015, the Company completed a private placement of Series B preferred shares and received net proceeds of approximately $62,500 (unaudited). In connection with the private placement, the holders of the Company's preference shares agreed to rename the Company's "preference shares" as "Series A preferred shares" pursuant to an amendment to the Company's Articles and Memorandum of Association and Articles of Association. All references to the Series A preferred shares in the accompanying financial statements and notes herein give retroactive effect to the renaming of the preference shares and is limited to only that change except for the additional rights of the Series A preferred shares discussed in Note 15, which are treated on a prospective basis.

The Company believes that its cash at December 31, 2014 and June 30, 2015 along with the net proceeds of $62,500 (unaudited) from the issuance of Series B preferred shares on August 14, 2015 will allow the Company to meet its working capital obligations and fund its operations through at least December 31, 2016.

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Risks and Uncertainties

The Company is subject to risks common to companies in the biotechnology industry including, but not limited to, new technological innovations, protection of proprietary technology, dependence on key personnel, compliance with government regulations and the need to obtain additional financing. The Company's therapeutic programs will require significant additional research and development efforts, including extensive pre-clinical and clinical testing and regulatory approval, prior to commercialization of any product candidates. These efforts require significant amounts of additional capital, adequate personnel infrastructure and extensive compliance-reporting capabilities.

The Company's therapeutic programs are currently in the development or discovery stage. There can be no assurance that the Company's research and development will be successfully completed, that adequate protection for the Company's intellectual property will be obtained, that any products developed will obtain necessary government regulatory approval or that any approved products will be commercially viable. Even if the Company's product development efforts are successful, it is uncertain when, if ever, the Company will generate significant revenue from product sales. The Company operates in an environment of rapid change in technology and substantial competition from pharmaceutical and biotechnology companies. In addition, the Company is dependent upon the services of its employees and consultants.

Basis of Presentation

The Company has prepared the accompanying consolidated financial statements in conformity with U.S. GAAP and in U.S. dollars.

2. SIGNIFICANT ACCOUNTING POLICIES

Unaudited Interim Financial Data

The accompanying interim consolidated balance sheet as of June 30, 2015, the related interim consolidated statements of operations, comprehensive loss and cash flows for the six months ended June 30, 2014 and 2015, the consolidated statement of shareholders' equity (deficit) for the six months ended June 30, 2015 and the related interim information contained within the notes to the consolidated financial statements have been prepared in accordance with the rules and regulations of the Securities and Exchange Commission for interim financial information. Accordingly, they do not include all of the information and the notes required by U.S. GAAP for complete financial statements. The financial data and other information disclosed in these notes related to the six months ended June 30, 2014 and 2015 are unaudited. In the opinion of management, the unaudited interim consolidated financial statements reflect all adjustments, consisting of normal and recurring adjustments, necessary for the fair presentation of the Company's financial position at June 30, 2015 and the consolidated results of its operations, comprehensive loss and cash flows for the six months ended June 30, 2015 are not necessarily indicative of the results to be expected for the year ending December 31, 2015 or any other interim period or future year or period.

Ordinary and Series A Preferred Share Split

The Company's board of directors and shareholders approved a 50-for-1 share split of its outstanding ordinary and Series A preferred shares effective November 18, 2014. All share and per share amounts in the consolidated financial statements and notes thereto have been retroactively adjusted for all periods presented to give effect to the share split.

Principles of Consolidation

The Company's consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All significant intercompany balances and transactions have been eliminated in consolidation.

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and

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liabilities at the date of the consolidated financial statements and the reported amounts of expenses during the reporting periods. Significant estimates and assumptions reflected in these consolidated financial statements include, but are not limited to the valuation of its Series A preferred shares on conversion of the related party notes payable, the valuation of the Company's ordinary shares, the assumptions used to determine the fair value share-based awards, the valuation allowance required for the Company's deferred tax assets, and determining uncertain tax positions and the related liabilities. Estimates are periodically reviewed in light of changes in circumstances, facts and experience. Actual results could differ from the Company's estimates.

Segment Data

The Company manages its operations as a single segment for the purposes of assessing performance and making operating decisions. The Company's singular focus is on developing its proprietary synthetic chemistry platform to develop and commercialize a broad pipeline of nucleic acid-based therapeutics.

Foreign Currency Translation

The functional currency of the Company's Japanese subsidiary and the Company's Singapore entity is the Japanese yen and U.S. dollar, respectively. Assets and liabilities of WAVE Japan are translated at period end exchange rates while revenues and expenses are translated at average exchange rates for the period. Intercompany loans that are not expected to be settled in the foreseeable future are translated at the historical rate for the date of each capital transaction. Net unrealized gains and losses from foreign currency translation are reflected as accumulated other comprehensive income within shareholders' (deficit) equity. Gains and losses on foreign currency transactions are included in the consolidated statements of operations within other, net.

Fair Value of Financial Instruments

The Company is required to disclose information on all assets and liabilities reported at fair value that enables an assessment of the inputs used in determining the reported fair values. The fair value hierarchy is a hierarchy of inputs used in measuring fair value that maximizes the use of observable inputs and minimizes the use of unobservable inputs by requiring that the observable inputs be used when available. Observable inputs are inputs that market participants would use in pricing the financial instrument based on market data obtained from sources independent of the Company. Unobservable inputs are inputs that reflect the Company's assumptions about the inputs that market participants would use in pricing the financial instrument and are developed based on the information available in the circumstances. The fair value hierarchy applies only to the valuation inputs used in determining the reported fair value of the investments and is not a measure of the investment credit quality. The hierarchy defines three levels of valuation inputs:

Level 1—Unadjusted quoted prices in active markets that are accessible at the measurement date of identical, unrestricted assets.

Level 2—Quoted prices for similar assets, or inputs that are observable, either directly or indirectly, for substantially the full term through corroboration with observable market data. Level 2 includes investments valued at quoted prices adjusted for legal or contractual restrictions specific to the security.

Level 3—Pricing inputs are unobservable for the asset, that is, inputs that reflect the reporting entity's own assumptions about the assumptions market participants would use in pricing the asset. Level 3 includes private investments that are supported by little or no market activity.

There were no financial instruments recorded at fair value as of December 31, 2013 and 2014 and June 30, 2015 (unaudited). The carrying amounts of accounts receivable, accounts payable, accrued expenses and related party notes payable approximate their fair values due to their short-term maturities.

Concentration of Credit Risk

Cash is a financial instrument that potentially subjects the Company to concentration of credit risk. The Company uses eight financial institutions to maintain its cash which are high quality, accredited financial institutions and,

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accordingly, such funds are subject to minimal credit risk. The Company has not experienced any losses in such accounts and management believes that the Company is not exposed to significant credit risk due to the financial position of the depository institutions in which those deposits are held. The Company has no financial instruments with off-balance sheet risk of loss.

Restricted Cash

Restricted cash consists primarily of cash placed in a separate restricted bank account as required under the terms of the Company's lease arrangement for its Cambridge, Massachusetts facility. There was no restricted cash as of December 31, 2013 and 2014.

Property and Equipment

Property and equipment, which consists of furniture and equipment and leasehold improvements are stated at cost less accumulated depreciation and amortization. Depreciation is calculated on a straight-line basis over the following estimated useful lives of the assets:

Furniture and Equipment	3-7 years
Leasehold Improvements	Shorter of life of lease or useful life

Depreciation and amortization begins at the time the asset is placed in service. Maintenance and repairs are charged to operations as incurred. Upon retirement or sale, the cost of the disposed asset and the related accumulated depreciation are removed from the accounts and any resulting gain or loss is reflected in the consolidated statements of operations.

Impairment of Long-Lived Assets

Long-lived assets consist of property and equipment. Long-lived assets are reviewed for impairment whenever events or other changes in circumstances indicate that the carrying amount may not be recoverable. Certain factors may exist or events may occur, which indicate that impairment exists including, but not limited to, the following: significant underperformance relative to historical or projected future operating results; significant changes in the manner of use of the underlying assets; and significant adverse industry or market economic trends.

When performing the impairment assessment for long-lived assets, the Company compares the carrying value of such assets to the estimated undiscounted future net cash flows expected from the use of the assets and their eventual disposition. In the event that the carrying value of the assets is determined to be unrecoverable, the Company would estimate the fair value of the assets and record an impairment charge for the excess of the carrying value over the fair value.

Through June 30, 2015 (unaudited), the Company has not recognized any impairment charges.

Deferred Offering Costs

The Company capitalizes certain legal, professional, accounting and other third party fees that are directly associated with in-process equity financings as deferred offering costs until such financings are consummated. After consummation of the equity financing, these costs are recorded in shareholders' equity (deficit) as a reduction to the carrying value of the shares issued.

There were none and $72 of deferred offering costs at December 31, 2013 and 2014, respectively. As of June 30, 2015, the Company has capitalized $669 (unaudited) of deferred offering costs in contemplation of its initial public offering. The Company will offset any deferred costs against proceeds upon the consummation of the initial public offering. If the initial public offering is terminated, deferred costs will be expensed.

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Revenue Recognition

Collaboration Agreement

The Company had a collaboration agreement with a third party, which was entered into in late 2014 and terminated in May 2015. The Company was entitled to a non-refundable upfront amount of $152 related to research and development services performed under the agreement. The upfront fee was billed in 2014 and collected in early 2015. The Company recorded its right to the upfront payment as accounts receivable and deferred revenue at December 31, 2014. Upon receipt of the non-refundable payment, the Company began recognizing the upfront fee on a straight-line basis over the service period. Upon termination of the agreement, the Company recognized the remainder of the upfront fee. Revenue recognized under the agreement was $152 (unaudited) for the six months ended June 30, 2015. There have been no other revenue generating activities from collaboration or license agreements entered into by the Company since its formation and through December 31, 2014 and June 30, 2015.

Product Revenue

The Company has had no product revenue to date.

Allowance for Doubtful Accounts

The Company has a limited amount of accounts receivable, which relate primarily to reimbursement of qualified expenditures under a government grant. The Company has not had any bad debts from the date of incorporation through December 31, 2014 and June 30, 2015 (unaudited). All amounts recorded as accounts receivable have been collected to date.

Research and Development Costs

Research and development costs are expensed as incurred. Research and development costs include salaries, share-based compensation and benefits of employees, third-party license fees and other operational costs related to the Company's research and development activities, including allocated facility-related expenses and external costs of outside vendors engaged to conduct preclinical studies and other research and development activities.

Government Grants

The Company has applied for reimbursement of expenditures with the Japanese government for certain qualified operating or capital expenditures. The Company recognizes government grants when there is reasonable assurance that the Company will comply with the conditions attached to the grant arrangement and the grant will be received.

Government grants for research and development efforts are recorded as grant income and classified in other, net in the consolidated statements of operations. Government grants related to reimbursements of capital expenditures are recognized as a reduction of the basis of the asset and recognized in the consolidated statements of operations over the estimated useful life of the depreciable asset as reduced depreciation expense.

The Company recognized other income of $43 and $160 for the years ended December 31, 2013 and 2014, respectively and $108 (unaudited) and $44 (unaudited) for the six months ended June 30, 2014 and 2015, respectively, which is included in the consolidated statements of operations.

The Company recorded reimbursable capital expenditures of $66 and $248 for the years ended December 31, 2013 and 2014, respectively, and $249 (unaudited) and $3 (unaudited) for the six months ended June 30, 2014 and 2015 (unaudited), respectively, for which a reduction in the basis of the assets purchased was recorded in the consolidated balance sheets.

Net Loss per Share

Basic net loss per share is computed using the weighted-average number of ordinary shares outstanding during the period. Diluted net loss per share is computed using the sum of the weighted-average number of ordinary shares outstanding during the period and, if dilutive, the weighted-average number of potential ordinary shares, including the assumed exercise of share options.

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The Company applies the two-class method to calculate its basic and diluted net loss per share attributable to ordinary shareholders, as its Series A preferred shares are participating securities. The two-class method is an earnings allocation formula that treats a participating security as having rights to earnings that otherwise would have been available to ordinary shareholders. However, for the periods presented, the two-class method does not impact the net loss per ordinary share as the Company was in a net loss position for each of the periods presented and holders of Series A preferred shares do not participate in losses.

The Company's Series A preferred shares contractually entitle the holders of such shares to participate in dividends but do not contractually require the holders of such shares to participate in losses of the Company. Accordingly, for periods in which the Company reports a net loss attributable to ordinary shareholders, diluted net loss per share attributable to ordinary shareholders is the same as basic net loss per share attributable to ordinary shareholders, since dilutive ordinary shares are not assumed to have been issued if their effect is anti-dilutive.

License Agreements and Patent Costs

Costs associated with licenses of technology and patent costs are expensed as incurred and are generally included in research and development expense in the consolidated statement of operations.

Share-Based Compensation

The Company measures and recognizes share-based compensation expense, for both employee and director option awards, based on the grant date fair value of the awards. The Company recognizes share-based compensation expense, net of estimated forfeitures, on a straight-line basis over the requisite service period of the awards, which is generally the vesting period.

The Company determines the fair value of share-based awards granted to non-employees as either the fair value of the consideration received or the fair value of the equity instruments issued, whichever is more reliably measurable. All issuances of equity instruments issued to non-employees as consideration for goods or services received by the Company are accounted for based on the fair value of the equity instruments issued. These awards are recorded in expense and additional paid-in capital in shareholders' (deficit) equity over the applicable service periods based on the fair value of the options at the end of each period.

The Company classifies share-based compensation expense in its consolidated statements of operations in the same manner in which the award recipient's payroll costs are classified or in which the award recipients' service payments are classified.

The Company estimates the fair value of employee and director share options as of the date of grant using the Black-Scholes option pricing model. The Company historically has been a private company and lacks company-specific historical and implied volatility information. Therefore, it estimates its expected share volatility based on the historical volatility of a publicly traded set of peer companies and expects to continue to do so until such time as it has adequate historical data regarding the volatility of its own traded share price. The expected term of the Company's share options has been determined utilizing the "simplified" method for awards that qualify as "plain-vanilla" options. The risk-free interest rate is determined by reference to the yield curve of a zero-coupon U.S. Treasury bond on the date of grant of the award for time periods approximately equal to the expected term of the award. Expected dividend yield is based on the fact that the Company has never paid cash dividends on ordinary shares and does not expect to pay any cash dividends in the foreseeable future.

The Company also estimates the fair value of consultant and non-employee share options using the Black-Scholes option pricing model reflecting the same assumptions as applied to employee and director options in each of the reporting periods, other than the expected life, which is assumed to be the remaining contractual life of the options.

Income Taxes

The Company accounts for income taxes using an asset and liability approach, which requires recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been recognized in the

consolidated financial statements, but have not been reflected in taxable income. A valuation allowance is established to reduce deferred tax assets to their estimated realizable value. Therefore, the Company provides a valuation allowance to the extent that it is more likely than not that all or a portion of the deferred tax assets will not be realized in the future.

The Company accounts for uncertainty in income taxes recognized in the financial statements by applying a two-step process to determine the amount of tax benefit to be recognized. First, the tax position must be evaluated to determine the likelihood that it will be sustained upon external examination by the taxing authorities. If the tax position is deemed more-likely-than-not to be sustained, the tax position is then assessed to determine the amount of benefit to recognize in the financial statements. The amount of the benefit that may be recognized is the largest amount that has a greater than 50% likelihood of being realized upon ultimate settlement. The provision for income taxes includes the effects of any resulting tax reserves, or unrecognized tax benefits, that are considered appropriate as well as the related net interest and penalties.

The Company recognizes interest and penalties related to uncertain tax positions in income tax provision.

Recently Adopted Accounting Pronouncements

In July 2013, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2013-11, *Presentation of an Unrecognized Tax Benefit When a Net Operating Loss Carryforward, a Similar Tax Loss, or a Tax Credit Carryforward Exists* ("ASU 2013-11"), which requires unrecognized tax benefits to be presented as a decrease in a net operating loss, similar tax loss or tax credit carryforward if certain criteria are met. The guidance was effective for fiscal years and interim periods within those years beginning after December 15, 2013 for public entities with early adoption permitted in 2013. The Company elected to early adopt ASU 2013-11 in 2013.

In June 2014, the FASB issued ASU 2014-10, *Development Stage Entities*. The amendments in this update removed all incremental financial reporting requirements, including inception-to-date information and certain other disclosures currently required under U.S. GAAP, in the financial statements of development stage companies. The amendments are effective for annual reporting periods beginning after December 15, 2014 and interim reporting periods beginning after December 15, 2015. Early adoption is permitted for any annual reporting period or interim period for which the entity's financial statements have not yet been issued (public business entities) or made available for issuance (other entities). The Company elected to early adopt this guidance in 2014 and, therefore, has not presented inception-to-date disclosures in its consolidated financial statements.

Recently Issued Accounting Pronouncements

In May 2014, the FASB issued ASU 2014-09—*Revenue from Contracts with Customers (Topic 606)* ("ASU 2014-09"). ASU 2014-09 supersedes most of the existing guidance on revenue recognition in ASC Topic 605, *Revenue Recognition*. The core principle of the revenue model is that an entity recognizes revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods and services. In applying the revenue model to contracts within its scope, an entity will need to (i) identify the contract(s) with a customer, (ii) identify the performance obligations in the contract, (iii) determine the transaction price, (iv) allocate the transaction price to the performance obligations in the contract and (v) recognize revenue when (or as) the entity satisfies a performance obligation. On July 9, 2015, the FASB extended the effective date of adoption of the standard to interim reporting periods within annual reporting periods beginning after December 15, 2017 (that is, beginning in the first interim period within the year of adoption). Early adoption of the standard is permitted for all entities for interim and annual periods beginning after December 15, 2016. The Company does not expect the impact of ASU 2014-09 to be material to its consolidated financial statements.

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In August 2014, the FASB issued ASU 2014-15, *Presentation of Financial Statements—Going Concern*, on disclosure of uncertainties about an entity's ability to continue as a going concern. This guidance addresses management's responsibility in evaluating whether there is substantial doubt about a company's ability to continue as a going concern and to provide related footnote disclosures. The guidance is effective for fiscal years beginning after December 15, 2016 and for interim periods within those fiscal years, with early adoption permitted. The Company does not expect the adoption of this guidance to have a material impact on the consolidated financial statements.

In February 2015, the FASB issued ASU 2015-02, *Consolidation* (Topic 810) ("ASU 2015-02"), to address financial reporting considerations for the evaluation as to the requirement to consolidate certain legal entities. ASU 2015-02 is effective for fiscal years and for interim periods within those fiscal years beginning after December 15, 2015. The Company is evaluating the impact of ASU 2015-02 and if early adoption is appropriate in future reporting periods.

In April 2015, the FASB issued ASU 2015-03, *Interest—Imputation of Interest (Subtopic 835-30)* ("ASU 2015-03"), as part of the initiative to reduce complexity in accounting standards. The update requires that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct deduction from the carrying amount of that debt liability, consistent with debt discounts. ASU 2015-03 is effective for annual periods beginning after December 15, 2015 and for interim periods within those fiscal years. The Company does not expect the impact of ASU 2015-03 to be material to its consolidated financial statements.

Other accounting standards that have been issued or proposed by the FASB or other standards-setting bodies that do not require adoption until a future date are not expected to have a material impact on the Company's consolidated financial statements upon adoption.

3. PROPERTY AND EQUIPMENT

Property and equipment, net, consists of the following:

	December 31,		June 30,
	2013	2014	2015
			(unaudited)
Furniture and equipment	$1,900	$ 2,331	$ 2,763
Leasehold improvements	148	147	536
Total	2,048	2,478	3,299
Less accumulated depreciation and amortization	(664)	(1,209)	(1,467)
Property and equipment, net	$1,384	$ 1,269	$ 1,832

Depreciation expense was $276 and $281 for the years ended December 31, 2013 and 2014, respectively, and $104 (unaudited) and $178 (unaudited) for the six months ended June 30, 2014 and 2015, respectively.

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4. ACCRUED EXPENSES

Accrued expenses and other current liabilities consist of the following:

	December 31, 2013	December 31, 2014	June 30, 2015 (unaudited)
Accrued compensation	$145	$428	$ 158
Accrued interest on related party notes payable	74	—	—
Other	52	177	215
Total accrued expenses and other current liabilities	$271	$605	$ 373

5. RELATED PARTY NOTES PAYABLE

At December 31, 2012, the Company had unsecured loans in the amount of $6,174 payable to SNBL with interest rates which ranged from 1.33% to 1.58% annually, which were due to mature in 2013. In 2013, the Company borrowed an additional $6,172 at similar interest rates, and repaid $2,500 of such loans plus accrued and unpaid interest. Additionally, in 2013, the maturity dates of the remaining loans were extended to dates in 2014 through new loan agreements and a loan between WAVE Japan and SNBL was transferred to WAVE Life Sciences Pte. Ltd. in U.S. dollars.

At December 31, 2013, the Company had unsecured loans in the amount of $9,602 payable to SNBL with interest rates which ranged from 1.18% to 1.35% annually, which were due to mature in 2014.

In February 2014 and in connection with the issuance of 560,000 ordinary shares to a third party investor, SNBL agreed to convert the outstanding principal and accrued interest due under the notes payable in the amount of $9,602 into 375,000 ordinary shares and 585,200 Series A preferred shares. No gain or loss was recognized on the transaction due to the related party nature of the transaction and because the fair value of the Series A preferred shares and ordinary shares was equal to the carrying value of the related party notes payable.

6. SHARE CAPITAL

Ordinary Shares

Historical Transactions

The following represents the historical ordinary share transactions of the Company from its incorporation through June 30, 2015:

- In September 2012, the Company issued an aggregate of 500,000 ordinary shares to the then shareholders of WAVE USA and WAVE Japan, as consideration for the merger of the companies under common control in which the WAVE USA and WAVE Japan historical carrying values of their respective net assets were carried forward to the consolidated Company.
- In October 2013, the holder of 380,100 ordinary shares agreed to convert its holdings into an equivalent number of Series A preferred shares.
- In February 2014, the Company issued 560,000 ordinary shares to a third-party investor at $10 per share for net proceeds of $5,585.
- In February 2014, holders of $9,602 of related party notes payable agreed to convert such notes into 585,200 Series A preferred shares and 375,000 ordinary shares (Note 5).

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- In January 2015, the Company issued 1,180,000 ordinary shares to a third-party investor and an existing investor at $10 per share for net proceeds of $11,631 (unaudited).
- In March 2015, the Company granted 47,223 fully-vested ordinary shares to an executive of the Company (unaudited).

Features of the Ordinary Shares

The ordinary shares have no par value and there is no authorized share capital under Singapore law. The rights, preferences, and privileges of ordinary shares are as follows:

New Share Offering

Any new ordinary shares or securities convertible into ordinary shares shall be offered in the first instance to all the then holders of any class of shares, other than the Series A preferred shares, prior to issuance. Each shareholder shall have right of pre-emption with respect to any issuance of new ordinary shares or securities convertible into ordinary shares. This right of pre-emption shall not apply to shares sold in an initial public offering of the Company's equity securities and shall terminate immediately prior to the closing of an initial public offering.

Voting

The holders of ordinary shares are entitled to one vote for each ordinary share held at all meetings of shareholders and written actions in lieu of meetings provided; however, that except as otherwise required by law, holders of ordinary shares shall not be entitled to implement the following without the approval of more than 75% of the Company's issued and outstanding ordinary shares:

(i) a merger, split, corporate reorganization, liquidation, dissolution, or winding up of the Company or any member of the group;
(ii) authorize or issue any additional shares, other equity interests in the Company or any convertible securities into such equity interests;
(iii) effect any public offering or listing of the equity securities of the Company; or
(iv) purchase, redeem, pay or declare any dividend on any shares or other equity interests in the Company.

Dividends

All dividends shall be declared and paid pro rata according to the number of shares held by each member entitled to receive dividends. The Company's board of directors may deduct from any dividend all sums of money presently payable by the member to the Company on account of calls.

Liquidation

In the event of a liquidation, dissolution or winding up of, or a return of capital by the Company, the ordinary shares will rank equally with the Series A preferred shares.

Board of Directors

The board of directors shall consist of a maximum of seven directors, who shall be appointed by a majority of the Company's issued and outstanding ordinary shares and a majority of the Company's directors. The chairman of the Company will be a director appointed by a majority of the Company's directors.

Series A Preferred Shares

Historical Transactions

The following represents the historical Series A preferred share transactions of the Company from its incorporation through June 30, 2015:

- In October 2013, holders of 380,100 ordinary shares agreed to convert their holdings into an equivalent number of Series A preferred shares.

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- In February 2014, holders of $9,602 of related party notes payable agreed to convert such notes into 585,200 Series A preferred shares and 375,000 ordinary shares (Note 5).

Features of the Series A Preferred Shares

The Series A preferred shares have no par value and there is no authorized share capital under Singapore law. Except as described below, the Series A preferred shares rank equally with ordinary shares. The rights, preferences, and privileges of the Series A preferred shares are as follows:

Dividends

Each Series A preferred share will carry a fixed non-cumulative preferential dividend at an annual rate of 15% of the issue price of the Series A preferred shares in preference to the ordinary shares, payable out of the distributable profits of the financial year, subject to approval by the Company's board of directors.

Liquidation

In the event of a liquidation, dissolution or winding up of, or a return of capital by the Company, the Series A preferred shares will rank equally with the ordinary shares. Further, the Series A preferred shares rank equally with ordinary shares, in every aspect relating to bankruptcy proceedings.

Voting

Holders of the Series A preferred shares are not entitled to vote at any general meeting. The only instances in which the holders of Series A preferred shares are able to vote at a general meeting would be if either of the following situations occur:

- the non-cumulative dividend payable on a Series A preferred share or any part thereof is in arrears and has remained unpaid for at least 12 months after it has been declared; or
- if the matters to be discussed at the meeting relate to or there is intent to pass resolutions on (i) abrogating or changing the rights attached to the Series A preferred shares; and (ii) for the winding up of the Company, such resolutions would require the unanimous approval of the holders of the Series A preferred shares.

Redemption

The Series A preferred shares are not redeemable.

Right of First Refusal

The Series A preferred shareholders are entitled to exercise a right of first refusal, a feature that dictates that in the case of a transfer by a specific shareholder (i) the Company, then (ii) the non-selling shareholder, and then (iii) any third party identified by the Company shall be entitled within a period of 60 days to serve a purchase notice to the selling shareholder requesting to sell to the Company or to the non-selling shareholder at the same price and terms as those offered by the prospective purchaser.

7. SHARE-BASED COMPENSATION

Adoption of Equity Incentive Plan

In December 2014, the Company's board of directors adopted the WAVE Life Sciences Pte. Ltd. 2014 Equity Incentive Plan (the "2014 Plan"), and reserved 436,391 ordinary shares for issuance under the this plan.

2014 Plan Activity (unaudited)

The 2014 Plan was approved by the Company's shareholders in January 2015. In March 2015, the Company's board and shareholders amended the plan to increase the number of ordinary shares issuable under the 2014 Plan to 618,221 ordinary shares. The 2014 Plan authorizes the board of directors or a committee of the board to grant incentive share options, non-qualified share options, or NQSOs, share appreciation rights and restricted awards to eligible employees, outside directors and consultants of the Company. As of June 30, 2015, 114,549 ordinary shares remained available for future grant.

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During the six months ended June 30, 2015, the Company granted options to purchase 456,449 ordinary shares to employees, directors and non-employees. The Company did not grant any share options during the years ended December 31, 2013 and 2014. The Company recorded share-based compensation expense of $2,492 during the six months ended June 30, 2015 of which $893 related to equity-classified options granted to non-employees. Options generally vest over a period of three or four years, and options that lapse or are forfeited are available to be granted again. The contractual life of all options is ten years. The Company measures and records the value of options granted to non-employees over the period of time services are provided and, as such, unvested portions are subject to re-measurement at subsequent reporting periods.

Share option activity under the 2014 Plan is summarized as follows:

	Number of Shares [1]	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value [2]
Outstanding as of January 1, 2015	—	$ —		
Granted	456,449	10.00		
Outstanding as of June 30, 2015	456,449	10.00		
Options vested and expected to vest as of June 30, 2015	438,711	10.00	9.70	$ 11,667
Options exercisable as of June 30, 2015	101,693	$ 10.00	9.70	$ 2,599

(1) Includes 135,467 options granted to non-employees during March 2015.
(2) The aggregate intrinsic value of options is calculated as the difference between the exercise price of the share options and the fair value of the Company's ordinary shares for those share options that had exercise prices lower than the fair value of the ordinary shares as of the end of the period.

As of June 30, 2015, the unrecognized compensation cost related to outstanding options was $3,580 and is expected to be recognized as expense over a weighted-average period of approximately 2.77 years. For the six months ended June 30, 2015, the weighted-average grant date fair value per granted option was $13.50.

In March 2015, the Company granted 47,223 fully-vested ordinary shares to an executive of the Company, and the Company recorded compensation expense in the amount of $842.

Share-based compensation expense was classified in the consolidated statements of operations as follows:

	Six Months Ended June 30, 2015
Research and development expenses	$ 1,182
General and administrative expenses	1,310
Total share-based compensation	$ 2,492

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The assumptions used in the Black-Scholes option pricing model to determine the fair value of share options granted to employees during the period were as follows:

	Six Months Ended June 30, 2015
Risk-free interest rate	1.78%
Expected term (in years)	5.52 – 6.08
Expected volatility	71.02%
Expected dividend yield	0%
Exercise price	$ 10.00
Fair value of ordinary share	$ 17.83

The assumptions used in the Black-Scholes option pricing model to determine the fair value of share options granted to non-employees during the period were as follows:

	Six Months Ended June 30, 2015
Risk-free interest rate	2.14% – 2.35%
Expected term (in years)	9.69 – 10.00
Expected volatility	69.16% – 69.80%
Expected dividend yield	0%
Exercise price	$ 10.00
Fair value of ordinary share	$ 17.83 – 35.56

The fair value of the Company's ordinary shares was determined based upon a retrospective valuation with the assistance of a third-party valuation specialist and the guidance outlined in the American Institute of Certified Public Accountants Aid, *Valuation of Privately-Held Company Equity Securities Issued as Compensation*, also known as the Practice Aid, based on a variety of different objective and subjective factors, including the Company's financial position, the status of development efforts within the Company, the composition and ability of the current scientific and management teams, the current climate in the marketplace, the illiquid nature of the Company's shares, the prices of arm's length sales of the Company's ordinary shares, and the likelihood of achieving a liquidity event such as a public offering or sale of the Company.

8. LEASES

The Company recorded rent expense of $248 and $294 for the years ended December 31, 2013 and 2014, respectively, and $138 (unaudited) and $143 (unaudited) for the six months ended June 30, 2014 and 2015, respectively.

Operating Leases

The Company leases its corporate office space in Boston, Massachusetts under a non-cancellable operating sublease with SNBL, a related party, which expires on August 1, 2019. The sublease had free rent that is being amortized on a straight-line basis over the term of the lease. The Company has the right to extend the lease for a five-year period.

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Future Minimum Lease Payments

Future minimum lease payments under the Company's non-cancelable operating leases as of December 31, 2014, are as follows:

	Operating Leases
Year ending December 31	
2015	$ 214
2016	214
2017	214
2018	214
2019	142
Thereafter	997
Total	$ 1,995

2015 Lease Agreement (unaudited)

In April 2015, the Company entered into a lease agreement for an office and laboratory facility in Cambridge, Massachusetts. The lease term is expected to commence in October 2015 and has a term of 7.5 years with a five year renewal option to extend the lease. In connection with signing the lease, the Company issued the lessor a letter of credit in the amount of $1,000, which is recorded as restricted cash on the consolidated balance sheets at June 30, 2015. Future minimum lease payments as of June 30, 2015 amounted to $200 in 2015, $834 in 2016, $1,030 in 2017, $1,321 in 2018, $1,360 in 2019 and $4,711 thereafter.

Capital Lease (unaudited)

In April 2015, the Company entered in a three year lease to acquire laboratory equipment, which has been accounted for as a capital lease. The capital asset was purchased for $268 and is included in property and equipment, net, along with accumulated amortization of $13 as of June 30, 2015.

9. COMMITMENTS AND CONTINGENCIES

Technology Licenses

Max-Planck Innovation GmbH (unaudited)

In June 2015, the Company entered into an agreement with Max-Planck-Innovation GmbH ("Max-Planck") through which it obtained a co-exclusive royalty-bearing, worldwide license with the right to sublicense to certain patent rights within a patent portfolio. The Company intends to develop and commercialize diagnostic and therapeutic products based on the Company's patent rights under this license. Max-Planck retains the right to use the intellectual property licensed under the agreement for non-commercial purposes.

The Company's license is one of two maximum allowable co-exclusive licenses for this technology. If either license holder terminates its respective co-exclusive portion of the license, Max-Planck is obligated to grant the other party an exclusive license with substantially the same terms and conditions previously applicable to the terminated co-exclusive licensee.

The Company is permitted to sublicense its rights under the license. The license requires that the Company use commercially reasonable efforts to develop and commercialize products under the agreement, whether solely or through its affiliates and sub-licensees. In order to secure the license, the Company made an upfront payment of $50 to Max-Planck and will be required to pay annual license maintenance fees of $30 to Max-Planck in June of

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each year under the agreement. The Company will be required to make payments based upon regulatory milestones, including the initiation of clinical trials, and product approval milestones totaling up to $1,575 for each licensed product reaching such clinical stage. In addition to milestone payments, the Company will be required to pay royalties in the low single digits, calculated as a percentage of cumulative annual net sales of a licensed product.

The Company recorded the $50 upfront payment as research and development expense in its consolidated statements of operations for the six months ended June 30, 2015. The agreement may be terminated by either party subject to certain conditions.

Research Collaborations

University of Oxford (unaudited)

In April 2015, the Company entered into a translational research collaboration agreement with The Chancellor, Masters, and Scholars of the University of Oxford (“Oxford”).

The agreement with Oxford involves characterizing the Company’s proprietary isomers in order to improve the pharmacology of oligonucleotides for the treatment of Duchenne muscular dystrophy. Under the agreement, the Company agreed to pay Oxford up to $380 to conduct specified research services for the Company’s benefit during an initial 18-month term, which may be extended by the parties.

The Company will own the results of the research conducted under the collaboration, including any potential intellectual property inventions. The agreement may be terminated by either party subject to certain conditions.

In the six months ended June 30, 2015, the Company incurred and paid $125 to Oxford pursuant to the agreement, which was recorded as research and development expense in its consolidated statements of operations. The remaining $255 is due in 2016.

The Children’s Hospital of Philadelphia (unaudited)

In April 2015, the Company entered into a master sponsored research agreement with The Children’s Hospital of Philadelphia (“CHOP”).

The agreement with CHOP involves characterization of the Company’s proprietary isomers for the treatment of Huntington’s disease. Under the agreement, the Company agreed to pay CHOP up to $194 to conduct research activities, on a project-by-project basis, for the Company’s benefit during a term that ends on the later of the five-year anniversary or the date that the last research project is completed.

Subject to certain conditions, the Company has a first and exclusive option to negotiate for a revenue-bearing license, exclusive or non-exclusive at its election, under all of CHOP’s interest in and to the CHOP intellectual property and the joint intellectual property resulting from each research project performed under the agreement, provided that the Company pays all costs for the preparation, filing, prosecution and maintenance of patents or other intellectual property protection in the case of an exclusive license or its pro rata costs in the case of a non-exclusive license.

The agreement may be terminated by either party subject to certain conditions.

In the six months ended June 30, 2015, the Company incurred and paid $145 to CHOP pursuant to the agreement, which was recorded as research and development expense in its consolidated statements of operations. The remaining $49 is due in 2016.

Other Commitments and Contingencies

Unasserted Claims

In the ordinary course of business, the Company may be subject to legal proceedings, claims and litigation as the Company operates in an industry susceptible to patent legal claims. The Company accounts for estimated losses with

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respect to legal proceedings and claims when such losses are probable and estimable. Legal costs associated with these matters are expensed when incurred. The Company is not currently a party to any legal proceedings.

10. NET LOSS PER ORDINARY SHARE

Basic loss per share is computed by dividing net loss attributable to ordinary shareholders by the weighted-average number of ordinary shares used in computing net loss per share attributable to ordinary shareholders:

	Year Ended December 31,		Six Months Ended June 30,	
	2013	2014	2014	2015
			(unaudited)	
Numerator:				
Net loss per share attributable to ordinary shareholders—basic and diluted	$ (3,318)	$ (5,229)	$ (2,117)	$ (7,165)
Denominator:				
Weighted-average ordinary shares used in computing net loss per share attributable to ordinary shareholders—basic and diluted	431,270	967,894	879,265	2,159,811
Net loss per share, basic and diluted	$ (7.69)	$ (5.40)	$ (2.41)	$ (3.32)

The Company's potentially dilutive shares, which include outstanding share options to purchase ordinary shares, are considered to be ordinary share equivalents and are only included in the calculation of diluted net loss per share when their effect is dilutive.

The following potential ordinary shares, presented based on amounts outstanding at each period end, were excluded from the calculation of diluted net loss per share attributable to ordinary shareholders for the periods indicated because including them would have had an anti-dilutive effect:

	Year Ended December 31,		Six Months Ended June 30,	
	2013	2014	2014	2015
			(unaudited)	
Options to purchase ordinary shares	—	—	—	456,449

11. INCOME TAXES

The components of loss before income taxes were as follows:

	Year Ended December 31,	
	2013	2014
Singapore	$(2,973)	$(4,542)
Rest of world	(675)	(603)
Loss before income taxes	$(3,648)	$(5,145)

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During the year ended December 31, 2013, the Company recorded a benefit for income taxes of $330 which is a result of changes in the United States valuation allowance during the period. During the year ended December 31, 2014, the Company recorded a provision for income taxes of $84 due to income taxed in the United States. During the six months ended June 30, 2014 and 2015, the Company recorded a tax provision of $60 (unaudited) and $99 (unaudited), respectively, which is a result of income taxed in the United States for each respective period.

During the years ended December 31, 2013 and 2014, and the six months ended June 30, 2014 and 2015, the Company recorded no income tax benefits for the net operating losses incurred in Japan, due to its uncertainty of realizing a benefit from those items.

The deferred components of the benefit (provision) for income taxes were as follows:

	Year Ended December 31,	
	2013	2014
Deferred tax benefit (provision):		
Singapore taxes	$ –	$ –
Rest of world taxes	330	(84)
Total deferred tax benefit (provision)	330	(84)
Total benefit (provision) income taxes	$ 330	$ (84)

There was no current portion of the benefit (provision) for income tax for the years ended December 31, 2013 and 2014.

A reconciliation of the Singapore statutory income tax rate to the Company's effective income tax rate is as follows:

	Year Ended December 31,	
	2013	2014
Singapore statutory income tax rate	17.0%	17.0%
Research and development tax credits	4.1	2.2
Permanent differences	(1.4)	—
Foreign exchange loss	0.8	2.0
Changes in reserves for uncertain tax positions	(2.1)	(2.2)
Foreign rate differential	3.9	4.5
Change in deferred tax asset valuation allowance	(13.3)	(25.1)
Effective income tax rate	9.0%	(1.6)%

The Company recorded income tax expense based on effective income tax rates of 2.9% (unaudited) and 1.4% (unaudited) for the six months ended June 30, 2014 and 2015, respectively. The Company's effective income tax rate is based upon estimated income for the year, the estimated composition of income in different jurisdictions and the resolution or identification of tax position uncertainties. For the six months ended June 30, 2014 and 2015, the Company's effective income tax rate was different than the Singapore statutory tax rate mainly due to the Company's inability to benefit from tax losses due to the existence of a valuation allowance in loss jurisdictions.

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The components of the Company's deferred tax assets as of December 31, 2013 and 2014, are as follows:

	December 31, 2013	December 31, 2014
Deferred tax assets:		
Net operating loss carryforwards	$ 1,206	$ 1,298
Research and development credits	310	384
Accrued expenses	41	63
Deferred expenses	513	1,295
Other	23	94
	2,093	3,134
Valuation allowance	(1,534)	(2,658)
Total deferred tax assets	559	476
Deferred tax liabilities:		
Depreciation	(229)	(230)
Total deferred tax liability	(229)	(230)
Net deferred tax asset (liability)	$ 330	$ 246

A roll-forward of the valuation allowance for the years ended December 31, 2013 and 2014 is as follows:

	Year Ended December 31, 2013	Year Ended December 31, 2014
Balance at beginning of year	$1,209	$1,534
Increase in valuation allowance	864	1,292
Reversal of valuation allowance	(379)	—
Effect of foreign currency translation	(160)	(168)
Balance at end of year	$1,534	$2,658

As of December 31, 2013 and 2014, the Company has net operating loss carryforwards in the United States of approximately $2,381 and $2,115, respectively, available to offset future U.S. federal taxable income and approximately $2,598 and $2,365, respectively, available to reduce future state taxable income. The U.S. federal and state net operating losses begin to expire in 2030. As of December 31, 2013 and 2014, the Company also has United States research and development credit carryforwards of approximately $291 and $367, respectively, available to offset future U.S. federal income taxes and approximately $146 and $204, respectively, available to offset future state income taxes. The U.S. federal and state research and development credits will begin to expire in 2030 and 2025, respectively.

As of December 31, 2013 and 2014, the Company has net operating loss carryforwards in Japan of $2,801 and $3,535, respectively, which may be available to offset future income tax liabilities and begin to expire in 2015.

During the six months ended June 30, 2015, gross deferred tax assets increased by approximately $1,173 (unaudited), due to net operating losses incurred by the Company in Japan and Singapore during the period. There was no income tax benefit (provision) recognized for the six months ended June 30, 2015 in these jurisdictions due to the continued generation of net operating losses.

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The Company has evaluated the positive and negative evidence bearing upon its ability to realize its deferred tax assets. Management has considered the Company's history of cumulative net losses incurred since inception and its lack of commercialization of any products or generation of any revenue from product sales since inception and has concluded that it is more likely than not that the Company will not realize the benefits of the deferred tax assets in Japan and Singapore. Accordingly, a full valuation allowance has been established against those deferred tax assets as of December 31, 2013, December 31, 2014, and June 30, 2015 (unaudited). The valuation allowance increased by approximately $864 in 2013 and $1,292 in 2014, primarily as a result of operating losses generated with no corresponding financial statement benefit. The Company may release this valuation allowance when management determines that it is more likely than not that the deferred tax assets will be realized. Any release of valuation allowance will be recorded as a tax benefit increasing net income.

At December 31, 2013, the Company determined that it was more likely than not that the Company would be able to realize the majority of the United States deferred tax assets primarily related to United States federal research and development credits, as a result of the research services agreement established between Singapore and the United States in 2013, which results in marginal profitability in the United States in 2013 and for the foreseeable future. Accordingly, the Company reversed $379 of its valuation allowance on United States federal and state deferred tax assets in 2013.

The Company's reserves related to taxes and its accounting for uncertain tax positions are based on a determination of whether and how much of a tax benefit taken by the Company in its tax filings or positions is more-likely-than-not to be realized following resolution of any potential contingencies present related to the tax benefit.

A summary of activity in the Company's unrecognized tax benefits is as follows:

	December 31	
	2013	2014
Unrecognized tax benefit beginning of year	$815	$ 901
Tax positions related to current year	86	124
Unrecognized tax benefit end of year	$901	$1,025

As of December 31, 2013 and 2014, the total amount of gross unrecognized tax benefits in the United States, which excludes interest and penalties, was $901 and $1,025, respectively. At December 31, 2013 and 2014, $819 and $925 of the net unrecognized tax benefits, respectively, would affect the Company's annual effective tax rate if recognized.

As discussed in Note 2, the Company early adopted ASU 2013-11 and therefore unrecognized tax benefits related to net operating losses are netted against the related deferred tax asset. The Company believes it is reasonably possible that approximately $700 of its unrecognized tax benefits may decrease by the end of 2015 as a result of the Company's intention to amend its tax filings for transfer pricing in prior years. The impact of the reversal of the uncertain tax benefit will reduce the net operating loss carryforwards in the United States.

The Company's policy is to record interest and penalties related to income taxes as part of its income tax provision. As of December 31, 2013 and 2014, the Company had no accrued interest or penalties related to uncertain tax positions, and no amounts have been recognized in the Company's statements of operations and comprehensive loss.

The Company files income tax returns as prescribed by the tax laws of the jurisdictions in which it operates. In the normal course of business, the Company is subject to examination by various taxing authorities in the United States, Japan, and Singapore. There are currently no pending income tax examinations. Tax years from 2010 to the present

are still open to examination in the United States, from 2008 to the present in Japan, and from 2012 to the present in Singapore. To the extent the Company has tax attribute carryforwards, the tax years in which the attribute was generated may still be adjusted upon examination by the Internal Revenue Service and state tax authorities to the extent utilized in a future period.

As of December 31, 2013 and 2014, $227 of $439 and $484 of $1,048, respectively, of cash was held by the subsidiaries outside of Singapore. The Company does not provide for Singapore income tax or foreign withholding taxes on foreign unrepatriated earnings, as the Company intends to permanently reinvest undistributed earnings in its foreign subsidiaries. If the Company decides to change this assertion in the future to repatriate any additional foreign earnings, the Company may be required to accrue and pay taxes. Because of the complexity of Singapore and foreign tax rules applicable to the distribution of earnings from foreign subsidiaries to Singapore, the determination of the unrecognized deferred tax liability on these earnings is not practicable.

Utilization of the net operating loss carryforwards and research and development tax credit carryforwards in the United States may be subject to a substantial annual limitation under Section 382 of the Internal Revenue Code of 1986 due to ownership changes that have occurred previously or that could occur in the future. These ownership changes may limit the amount of carryforwards that can be utilized annually to offset future taxable income. In general, an ownership change, as defined by Section 382, results from transactions increasing the ownership of certain shareholders or public groups in the shares of a corporation by more than 50% over a three-year period. The Company has not conducted a study to assess whether a change of control has occurred or whether there have been multiple changes of control since inception due to the significant complexity and cost associated with such a study. If the Company has experienced a change of control, as defined by Section 382, at any time since inception, utilization of the net operating loss carryforwards or research and development tax credit carryforwards would be subject to an annual limitation under Section 382, which is determined by first multiplying the value of the Company's shares at the time of the ownership change by the applicable long-term tax-exempt rate, and then could be subject to additional adjustments, as required. Any limitation may result in expiration of a portion of the net operating loss carryforwards or research and development tax credit carryforwards before utilization. Further, until a study is completed and any limitation is known, no amounts are being presented as an uncertain tax position.

12. EMPLOYEE BENEFIT PLANS

In 2013, the Company adopted a 401(k) retirement and savings plan (the "401(k) Plan") covering all U.S.-based employees. The 401(k) Plan allows employees to make pre-tax contributions up to the maximum allowable amount set by the IRS. Under the 401(k) Plan, the Company may make discretionary contributions as approved by the board of directors. During the years ended December 31, 2013 and December 31, 2014, and the six months ended June 30, 2014 and June 30, 2015, the Company did not make contributions to the 401(k) Plan.

The Company has a J401(k) defined contribution pension plan covering all Japan-based permanent employees that was adopted in 2010. The J401(k) defined contribution pension plan allows the Company to make pre-tax contributions up to the maximum allowable amount set by the chief officer of the Kyushu Regional Bureau of Health and Welfare's approval and company's wage regulation. Under the J401(k) defined contribution pension plan, the Company may make discretionary contributions as approved by the Board of Directors. The Company has made contributions of $3 (unaudited) through June 30, 2015.

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13. RELATED PARTIES

The Company had the following related party transactions for the periods presented in the accompanying consolidated financial statements, which have not otherwise been discussed in these notes to the consolidated financial statements:

- The Company has cash of $3, $17, and $10 (unaudited) at December 31, 2013 and 2014 and June 30, 2015, respectively, in depository accounts with one of its investors, who became an investor in February 2014.
- Pursuant to the terms of a service agreement previously held with SNBL, a related party, the Company paid SNBL $245 and $71 in the years ended December 31, 2013 and 2014, respectively, and $1 (unaudited) in the six months ended June 30, 2015, for accounting and administrative services provided to the Company and its affiliates.
- In 2012, the Company entered into a consulting agreement with a shareholder for services in the capacity as a scientific advisor. The consulting agreement does not have a certain term and may be terminated by either party upon 14 days' prior written notice. The Company pays the shareholder $13 per month and reimbursement for certain expenses.
- The Company also has an informal consulting arrangement with a shareholder in the amount of 250 Japanese yen, or $2, per month, plus reimbursement of certain expenses, for scientific advisory services.

14. GEOGRAPHIC DATA

The Company's long-lived assets consist of property and equipment and are located in the following geographical areas:

	December 31, 2013	December 31, 2014	June 30, 2015 (unaudited)
Asia	$ 777	$ 745	$ 650
United States	607	524	1,182
Total long-lived assets	$1,384	$1,269	$ 1,832

15. SUBSEQUENT EVENTS (UNAUDITED)

In preparing the financial statements as of and for the year ended December 31, 2014, we evaluated subsequent events for recognition and measurement purposes through September 4, 2015, the date that the independent auditors' report was originally issued and the audited annual consolidated financial statements were available for issuance. After the original issuance of the consolidated financial statements and through October 9, 2015, we have evaluated subsequent events or transactions that have occurred that may require disclosure in the accompanying financial statements. Except as described below, the Company has concluded that no events or transactions have occurred that require disclosure in the accompanying consolidated financial statements.

On August 14, 2015, the Company issued an aggregate of 1,320,000 Series B preferred shares at a purchase price of $50 per share to certain third-party investors for $62,500 of net proceeds.

As discussed in Note 1, in connection with the private placement of Series B preferred shares, holders of the Company's preference shares agreed to rename the existing "preference shares" as "Series A preferred shares." In addition, as further described below, the terms of the Series A preferred shares were substantively amended to

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remove their right of first refusal and to provide for their right to convert on a one-for-one basis into an aggregate of 965,300 ordinary shares at any time at the election of the holder. The rights of the Series A preferred shares are identical to the ordinary shares other than: (1) no voting rights other than in limited circumstances, (2) the right to a non-cumulative dividend if and when declared by our board of directors and (3) the right to convert the Series A preferred shares at any time on a one-for-one basis into ordinary shares at the discretion of the holder. The Company's shareholders, including holders of Series A preferred shares, entered into an investors' rights agreement and a voting agreement with the Company in connection with the private placement. Pursuant to the terms of the voting agreement, investors who hold at least 300,000 shares of registerable securities, including holders of Series A preferred shares and Series B preferred shares, have a right to purchase certain new securities offered by the Company. Additionally, in the event of the sale of 50% or more of the voting power of the company or a deemed liquidation event, if the holders of at least a majority of the ordinary shares and the holders of 56% of the Series B preferred shares vote to a sale of the Company, they have the right to force the other shareholders, including the holders of Series A preferred shares, to agree to such a sale.

On August 14, 2015, the Company's board of directors approved an increase in the number of ordinary shares issuable under the 2014 Plan from 618,221 to 879,800 shares.

On September 28, 2015, the terms of the Series A preferred shares were further substantively amended to provide that, upon the closing of an initial public offering, the existing right of Series A preferred shares to a non-cumulative dividend if and when declared by our board of directors shall cease and be replaced by a liquidation preference consisting of $0.01 per Series A preferred share, or an aggregate of $10 based on the number of Series A preferred shares outstanding at the date of the amendment.

Shares

Ordinary Shares

PRELIMINARY PROSPECTUS

Joint Book-Running Managers

Jefferies
Leerink Partners

, 2015

Until , 2015 (25 days after the commencement of this offering), all dealers effecting transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This delivery requirement is in addition to the obligation of dealers to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution

The following table sets forth all costs and expenses, other than the underwriting discounts and commissions payable by us, in connection with the offer and sale of the securities being registered. All amounts shown are estimates except for the SEC registration fee and the FINRA filing fee.

	Amount to be Paid
SEC registration fee	$ 8,056
FINRA filing fee	12,500
Stock exchange listing fee	*
Legal fees and expenses	*
Accounting fees and expenses	*
Printing and engraving	*
Miscellaneous fees and expenses	*
Total	*

* To be filed by amendment.

Item 14. Indemnification of Directors and Officers

Section 172 of the Singapore Companies Act prohibits a company from exempting or indemnifying its officers (including directors acting in an executive capacity) or auditors against any liability, which by law would otherwise attach to them for any negligence, default, breach of duty or breach of trust of which they may be guilty relating to us. However, a company is not prohibited from (a) purchasing and maintaining for any such individual insurance against any such liability, or (b) indemnifying such individual against any liability incurred by him in defending any proceedings, whether civil or criminal, in which judgment is given in his favor or in which he is acquitted, or in connection with any application under Section 76A(13) or 391 or any other provision of the Singapore Companies Act in which relief is granted to him by the court. It is expected that the restriction in Section 172 of the Singapore Companies Act will be amended in the second phase of implementation of the Companies (Amendment) Act 2014 to enable a company to indemnify its officers against third party liability, except in circumstances where such liability is for any criminal or regulatory fines or penalties, or where such liability is incurred in respect of (i) defending criminal proceedings in which he or she is convicted, (ii) defending civil proceedings commenced by the company or a related company against him in which judgment is given against him or (iii) in connection with an application for relief under section 76A(13) or section 391 of the Singapore Companies Act in which the court refuses to grant him relief.

Subject to the Singapore Companies Act and every other Singapore statute for the time being in force concerning companies and affecting us, our articles of association provide that each of our directors and officers and those of our subsidiaries and affiliates shall be entitled to be indemnified by us or such subsidiary against any liability incurred by him or her arising out of or in connection with any acts, omissions or conduct, actual or alleged, by such individual acting in his or her capacity as either director, officer, secretary or employee of us or the relevant subsidiary, except to such extent as would not be permitted under applicable Singapore laws or which would otherwise result in such indemnity being void in accordance with the provisions of the Singapore Companies Act.

We may indemnify our directors and officers against costs, charges, fees, expenses and liabilities that may be incurred by any of them in defending any proceedings (whether civil or criminal) relating to anything done or omitted or alleged to be done or omitted by such person acting in his or her capacity as a director, officer or employee of our company, in which judgment is given in his or her favor, or in which he or she is acquitted or in which the courts have granted relief pursuant to the provisions of the Singapore Companies Act or other applicable statutes, provided

that such indemnity shall not extend to any liability which by law would otherwise attach to him or her in respect of any negligence, default, breach of duty or breach of trust in relation to our company, or which would otherwise result in such indemnity being voided under applicable Singapore laws. No director or officer of our company shall be liable for any acts, omissions, neglects, defaults or other conduct of any other director or officer, and to the extent permitted by Singapore law, our company shall contribute to the amount paid or payable by a director or officer in such proportion as is appropriate to reflect the relative fault of such director or officer, taking into consideration any other relevant equitable considerations, including acts of other directors or officers and our company, and the relative fault of such parties in respect thereof.

In addition, no director, managing director or other officer shall be liable for the acts, receipts, neglects or defaults of any other director or officer, or for joining in any receipt or other act for conformity, or for any loss or expense incurred by us, through the insufficiency or deficiency of title to any property acquired by order of the directors for us or for the insufficiency or deficiency of any security upon which any of our moneys are invested or for any loss or damage arising from the bankruptcy, insolvency or tortious act of any person with whom any moneys, securities or effects are deposited, or any other loss, damage or misfortune which happens in the execution of his duties, unless the same happens through his own negligence, default, breach of duty or breach of trust.

We have entered into deeds of indemnity with each of our directors and our president and chief executive officer. These agreements require us to indemnify these individuals to the fullest extent permitted under Singapore law against liabilities that may arise by reason of their service to us, as a result of any proceeding against them as to which they could be indemnified. These indemnification rights shall not be exclusive of any other right which an indemnified person may have or hereafter acquire under any statute, provision of our articles of association, agreement, vote of shareholders or disinterested directors or otherwise if such indemnified person is subsequently found to have been negligent or otherwise have breached indemnified person's trust or fiduciary duties or to be in default thereof, or where the Singapore courts have declined to grant relief.

We expect to maintain standard policies of insurance that provide coverage (1) to our directors and officers against loss rising from claims made by reason of breach of duty or other wrongful act and (2) to us with respect to indemnification payments that we may make to such directors and officers.

The proposed form of Underwriting Agreement to be filed as Exhibit 1.1 to this Registration Statement provides for indemnification to our directors and officers by the underwriters against certain liabilities.

Item 15. Recent Sales of Unregistered Securities

The following list sets forth information regarding the unregistered securities issued by us since January 1, 2012 through the date of the prospectus that is a part of this registration statement.

Issuances of Preferred Shares and Ordinary Shares

The sale and issuance of the securities set forth below were deemed to be exempt from registration under the Securities Act by virtue of Section 4(2) or Rule 506 promulgated under Registration D promulgated thereunder and Section 3(a)(9). Each of the recipients of securities in these transactions was an accredited investor within the meaning of Rule 501 of Regulation D under the Securities Act and had adequate access, through employment, business or other relationships, to information about us. No underwriters were involved in these transactions.

On September 13, 2012, we issued 50,000 ordinary shares to Dr. Gregory L. Verdine in exchange for 750 shares of common stock of WAVE USA and 200,000 ordinary shares to Shin Nippon Biomedical Laboratories, Ltd., or SNBL, in exchange for 3,000 shares of common stock of WAVE USA. We also issued 24,900 ordinary shares to Dr. Takeshi Wada in exchange for 152 ordinary shares of WAVE Japan and 225,100 ordinary shares to SNBL in exchange for 1,374 ordinary shares of WAVE Japan.

On February 3, 2014, we entered into a subscription agreement with Kagoshima Shinsangyo Sousei Investment Limited Partnership, or KSS, pursuant to which we issued 560,000 of our ordinary shares to KSS at a purchase price of $10.00 per share for a total consideration of $5.6 million.

On February 3, 2014, we issued 585,200 of our Series A preferred shares and 375,000 of our ordinary shares to SNBL, in exchange for the cancellation of certain debt obligations owed by us to SNBL in the amount of approximately $9.6 million.

On January 16, 2015, we issued an aggregate of 1,180,000 ordinary shares at a purchase price of $10.00 per share to two accredited investors, both of whom are beneficial owners of more than 5% of our outstanding shares. RA Capital Health Care Fund, L.P., or RA Capital, purchased 1,000,000 ordinary shares in this transaction at a purchase price of $10.0 million. KSS also purchased 180,000 ordinary shares in this transaction at a purchase price of $1.8 million.

On August 14, 2015, we issued an aggregate of 1,320,000 Series B preferred shares at a purchase price of $50.00 per share to 19 accredited investors, five of whom (and their affiliates) are beneficial owners of more than 5% of our outstanding shares. RA Capital and one of its affiliates, purchased 290,000 Series B preferred shares in this transaction at a purchase price of $14.5 million. KSS and an affiliate of SNBL also each purchased 40,000 Series B preferred shares in this transaction at a purchase price of $2.0 million each. Foresite Capital Fund III, L.P. purchased 330,000 Series B preferred shares in this transaction at a purchase price of $16.5 million, Entities affiliated with FMR LLC purchased 300,000 Series B preferred shares in this transaction at a purchase price of $15.0 million.

Grants of Share Options and Issuances of Ordinary Shares

On March 10, 2015, we issued a share award of 47,223 of our ordinary shares and an aggregate of 426,449 options to purchase our ordinary shares at an exercise price of $10.00 per share to certain of our employees and directors pursuant to our 2014 Equity Incentive Plan, or the 2014 Plan.

On March 22, 2015, we issued options to purchase an aggregate of 30,000 of our ordinary shares at an exercise price of $10.00 per share pursuant to our 2014 Plan. On March 31, 2015, we issued a share award of 47,223 ordinary shares to an employee pursuant to the 2014 Plan.

On July 9, 2015, we granted options to purchase an aggregate of 24,400 of our ordinary shares at an exercise price of $24.21 per share to certain of our employees pursuant to the 2014 Plan.

On October 7, 2015, we granted options to purchase an aggregate of 17,650 of our ordinary shares at an exercise price of $41.30 per share to certain of our employees pursuant to the 2014 Plan.

None of the foregoing transactions involved any underwriters, underwriting discounts or commissions, or any public offering. We believe that the offers, sales and issuances of the above securities were exempt from registration under the Securities Act by virtue of Section 4(a)(2) of the Securities Act or Regulation D promulgated thereunder as transactions by an issuer not involving any public offering, or in reliance on Rule 701 promulgated under Section 3(b) of the Securities Act because the transactions were pursuant to compensatory benefit plans or contracts relating to compensation as provided under Rule 701. The recipients of the securities in each of these transactions represented their intentions to acquire the securities for investment only and not with a view to or for sale in connection with any distribution thereof, and appropriate legends were placed upon the share certificates issued in these transactions. We believe all recipients had adequate information about us or had adequate access, through their relationships with us, to information about us.

Item 16. Exhibits and Financial Statement Schedules

(a) The list of exhibits is set forth under “Exhibit Index” at the end of this registration statement and is incorporated herein by reference.

(b) See the Index to Financial Statements included on page F-1 for a list of the financial statements included in this registration statement. All schedules not identified above have been omitted because they are not required, are inapplicable, or the information is included in the combined financial statements or notes contained in this registration statement.

Certain of the agreements included as exhibits to this prospectus contain representations and warranties by each of the parties to the applicable agreement. These representations and warranties have been made solely for the benefit of the other parties to the applicable agreement and:

- should not in all instances be treated as categorical statements of fact, but rather as a way of allocating the risk to one of the parties if those statements prove to be inaccurate;
- have been qualified by disclosures that were made to the other party in connection with the negotiation of the applicable agreement, which disclosures are not necessarily reflected in the agreement;
- may apply standards of materiality in a way that is different from what may be viewed as material to you or other investors; and
- were made only as of the date of the applicable agreement or such other date or dates as may be specified in the agreement and are subject to more recent developments.

The registrant acknowledges that, notwithstanding the inclusion of the foregoing cautionary statements, it is responsible for considering whether additional specific disclosures of material information regarding material contractual provisions are required to make the statements in this registration statement not misleading.

Item 17. Undertakings

The undersigned registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreement certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission, such indemnification is against public policy as expressed in the Securities Act, and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question of whether such indemnification is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes that:

(i) for purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective; and

(ii) for the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Cambridge, Massachusetts, on the 9th day of October, 2015.

WAVE LIFE SCIENCES PTE. LTD.

/s/ Paul B. Bolno, M.D.
Paul B. Bolno, M.D.
President and Chief Executive Officer

Power of Attorney

KNOW ALL BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Paul B. Bolno, M.D. and Kyle Moran, and each of them, his true and lawful agent, proxy and attorney-in-fact, with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to (1) act on, sign and file with the Securities and Exchange Commission any and all amendments (including post-effective amendments) to this registration statement together with all schedules and exhibits thereto and any subsequent registration statement filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended, together with all schedules and exhibits thereto, (2) act on, sign and file such certificates, instruments, agreements and other documents as may be necessary or appropriate in connection therewith, (3) act on and file any supplement to any prospectus included in this registration statement or any such amendment or any subsequent registration statement filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and (4) take any and all actions which may be necessary or appropriate to be done, as fully for all intents and purposes as he might or could do in person, hereby approving, ratifying and confirming all that such agent, proxy and attorney-in-fact or any of his substitutes may lawfully do or cause to be done by virtue thereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Paul B. Bolno, M.D. Paul B. Bolno, M.D.	President, Chief Executive Officer and Director (*Principal Executive Officer*)	October 9, 2015
/s/ Kyle Moran Kyle Moran	Vice President, Head of Finance (*Principal Financial Officer and Principal Accounting Officer*)	October 9, 2015
/s/ Gregory L. Verdine, Ph.D. Gregory L. Verdine, Ph.D.	Chairman of the Board	October 9, 2015
/s/ Peter Kolchinsky, Ph.D. Peter Kolchinsky, Ph.D.	Director	October 9, 2015
/s/ Koji Miura Koji Miura	Director	October 9, 2015
/s/ Ken Takanashi Ken Takanashi	Director	October 9, 2015

Signature	Title	Date
/s/ Masaharu Tanaka Masaharu Tanaka	Director	October 9, 2015
/s/ Takeshi Wada, Ph.D. Takeshi Wada, Ph.D.	Director	October 9, 2015

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EXHIBIT INDEX

Exhibit No.	Description
1.1*	Form of Underwriting Agreement.
3.1	Memorandum of Association and Articles of Association.
3.2*	Form of Memorandum of Association and Articles of Association to become effective as of the closing of this offering.
4.1*	Form of Specimen Ordinary Share Certificate.
4.2	Investors' Rights Agreement by and among the Registrant and certain of its shareholders, dated as of August 14, 2015.
5.1*	Opinion of Mintz, Levin, Cohn, Ferris, Glovsky, and Popeo, P.C.
10.1+	WAVE Life Sciences Pte. Ltd. 2014 Equity Incentive Plan and forms of agreement thereunder.
10.2	Lease Agreement by and among Harvard Real Estate—Allston, Inc., Shin Nippon Biomedical Laboratories Ltd., dated June 25, 2009.
10.3	Sub-Lease Agreement by and among SNBL USA, Ltd. and Ontorii, Inc. (now WAVE USA), dated as of January 1, 2010.
10.4	Consent to Office Space Sub-Lease by and among SNBL USA, Ltd, Ontorii, Inc. (now WAVE USA) and Harvard Real Estate—Allston, Inc., dated as of January 1, 2010.
10.5	Amendment 1 to the Commercial Lease Agreement, by and between SNBL USA, Ltd. and Ontorii, Inc. (now WAVE USA), dated as of July 1, 2011.
10.6*	Okinawa Health Biotechnology R&D Center Lease Agreement by and between WAVE Life Sciences (Japan).
10.7	Lease Agreement by and between the Registrant and King 733 Concord LLC, dated as of April 6, 2015.
10.8†	Master Sponsored Research Agreement by and between the Registrant and The Children's Hospital of Philadelphia, dated as of April 1, 2015.
10.9†	Research Agreement between the Registrant and the Chancellor, Masters, and Scholars of the University of Oxford, dated as of March 2015.
10.10†	Co-Exclusive License Agreement between the Registrant and Max-Planck-Innovation GmbH, dated as of June 8, 2015.
10.11+	Form of Deed of Indemnity by and between the Registrant and each of its directors and officers.
10.12+	Employment Agreement by and between the Registrant and Paul B. Bolno, M.D., dated as of December 12, 2013.
10.13+	Employment Agreement by and between the Registrant and Roberto Guerciolini, dated as of March 10, 2015.
10.14+	Offer Letter by and between the Registrant and Chandra Vargeese, Ph.D., dated as of July 18, 2014.
10.15+	Offer Letter by and between the Registrant and Christopher Francis, Ph.D., dated as of March 20, 2014.
10.16+	Consulting Agreement by and between the Ontorii (now WAVE, USA) and Gregory Verdine, dated as of April 1, 2012.
10.17+	Nominee Director Fee Agreement by and between the Registrant and Miura & Associates Management Consultants Pte. Ltd., dated as of October 23, 2012.

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Exhibit No.	Description
10.18†	Research Agreement by and between the Registrant and The University of Dundee, dated as of September 23, 2015.
21.1	Subsidiaries of the Registrant.
23.1	Consent of Independent Registered Public Accounting Firm.
23.2*	Consent of Mintz, Levin, Cohn, Ferris, Glovsky, and Popeo, P.C. (included in Exhibit 5.1).
24.1	Power of Attorney (included on the signature page to this registration statement).

* To be filed by amendment.
\+ Indicates management contract or compensatory plan.
† Confidential treatment has been requested with respect to certain portions of this exhibit. Omitted portion have been filed separately with the Securities and Exchange Commission.

Exhibit 3.1

No. of Company: 201218209G

THE COMPANIES ACT, CAP. 50

PRIVATE COMPANY LIMITED BY SHARES

MEMORANDUM OF ASSOCIATION

AND

ARTICLES OF ASSOCIATION

OF

WAVE LIFE SCIENCES PTE. LTD.

Incorporated on the 23rd day of July, 2012

Lodged in the Office of the Accounting & Corporate Regulatory Authority, Singapore

(as adopted by special resolution dated September 28, 2015)

THE COMPANIES ACT, CAP. 50

PRIVATE COMPANY LIMITED BY SHARES

MEMORANDUM OF ASSOCIATION

OF

WAVE LIFE SCIENCES PTE. LTD.

(as adopted by special resolution dated September 28, 2015)

1. NAME

The name of the Company is **WAVE LIFE SCIENCES PTE. LTD.**

2. REGISTERED OFFICE

The Registered Office of the Company will be situated in the Republic of Singapore.

3. BUSINESS OR ACTIVITY

Subject to the provisions of the Companies Act, Cap. 50 and any other written law and the Memorandum and Articles of Association, the Company has:

(a) full capacity to carry on or undertake any business or activity, do any act or enter into any transaction; and

(b) for the purposes of paragraph (a), full rights, powers and privileges.

4. LIABILITY OF MEMBERS

The liability of the Members is limited.

5. SHARE CAPITAL

The Company shall have power to consolidate or subdivide the shares and to issue any additional capital as fully paid or partly paid shares and with any special or preferential rights or privileges or subject to any special terms or conditions, and either with or without any special designation, and also from time to time to alter, modify, commute, abrogate or deal with any such rights, privileges, term, conditions or designations in accordance with the regulations for the time being of the Company.

THE COMPANIES ACT, CAP. 50

PRIVATE COMPANY LIMITED BY SHARES

ARTICLES OF ASSOCIATION

OF

WAVE LIFE SCIENCES PTE. LTD.

(as adopted by special resolution dated September 28, 2015)

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1. The regulations contained in Table "A" in the Fourth Schedule to the Companies Act, Cap. 50 shall not apply to the Company, but the following shall subject to repeal, additional and alteration as provided by the Act or these Articles be the regulations of the Company.

2. In these Articles, if not inconsistent with the subject or context, the words standing in the first column of the Table next hereinafter contained shall bear the meanings set opposite to them respectively in the second column thereof:

WORDS	**MEANINGS**
The "Act"	The Companies Act, Cap. 50 or any statutory modification, amendment or re-enactment thereof for the time being in force or any and every other act for the time being in force concerning companies and affecting the Company and any reference to any provision of the Act is to that provision as so modified, amended or re-enacted or contained in any such subsequent Companies Act.
these "Articles"	These Articles of Association or other regulations of the Company for the time being in force.
"Auditors"	The auditors for the time being of the Company.
the "Company"	The above named Company by whatever name from time to time called.
"Alternate Director"	A person appointed as an alternate Director pursuant to Article 109.
"Business Day"	Any day (other than a Saturday, Sunday or gazetted public holiday) on which commercial banks are open for business in Singapore and, if on that day, a transfer of funds is to be made in respect of the Series B Preferred Shares, the city of New York also.
"Deemed Liquidation Event"	Each of the following events, unless the holders of at least 56% of the then issued Series B Preferred Shares elect otherwise by written notice sent to the Company at least ten (10) days prior to the effective date of any such event: (a) a merger or consolidation in which (i) the Company is a constituent party or (ii) a subsidiary of the Company is a constituent party and the

	Company issues shares in the capital of the Company pursuant to such merger or consolidation, except any such merger or consolidation involving the Company or a subsidiary in which the shares in the issued and paid-up capital of the Company immediately prior to such merger or consolidation continue to represent, or are converted into or exchanged for shares in the capital of the Company that represent, immediately following such merger or consolidation, at least a majority, by voting power, shares in the capital of (1) the surviving or resulting corporation; or (2) if the surviving or resulting corporation is a wholly owned subsidiary of another corporation immediately following such merger or consolidation, the parent corporation of such surviving or resulting corporation; or (b) the sale, lease, transfer, exclusive license or other disposition, in a single transaction or series of related transactions, by the Company or any subsidiary of the Company of all or substantially all the assets of the Company and its subsidiaries taken as a whole, or the sale or disposition (whether by merger, consolidation or otherwise) of one or more subsidiaries of the Company if substantially all of the assets of the Company and its subsidiaries taken as a whole are held by such subsidiary or subsidiaries, except where such sale, lease, transfer, exclusive license or other disposition is to a wholly owned subsidiary of the Company.
“Directors”	The Directors for the time being of the Company or such number of them as have authority to act for the Company.
“Director”	Includes any person acting as a Director of the Company and includes any person duly appointed and acting for the time being as an Alternate Director.
“Dividend”	Includes bonus dividends.
“electronic communication”	Communication transmitted (whether from one (1) person to another, from one (1) device to another, from a person to a device or from a device to a person): (a) by means of a telecommunication system; or (b) by other means but while in an electronic form. such that it can (where particular conditions are met) be received in legible form or be made legible following receipt in non-legible form.
“Member”	Any registered holder of one (1) or more shares (of any class or domination) in the capital of the Company from time to time.
“Month”	Calendar month.
“Office”	The Registered Office of the Company for the time being.
“Ordinary Resolution”	A resolution not being a Special Resolution which is, or which is to be, passed by a majority of Members as, being entitled to do so, vote in person or by proxy at a general meeting.
“Ordinary Shares”	The ordinary shares in the capital of the Company; provided, that if all Ordinary Shares are replaced by other securities (all of which are identical), the expression “Ordinary Shares” shall thereafter refer to such other securities.

“Ordinary Shareholders”	The holders of the Ordinary Shares who are registered as Members of the Company and “Ordinary Shareholder” means any one of them.
“Paid Up”	Includes credited as paid up.
“Preferred Shares”	The preferred shares in the capital of the Company carrying the rights, privileges and benefits set out in these Articles.
“Preferred Shareholders”	The holders of the Preferred Shares who are registered as Members of the Company and “Preferred Shareholder” means any one of them.
“Register”	The Register of Members of the Company.
“Seal”	The Common Seal of the Company or in appropriate cases the Official Seal or duplicate Common Seal.
“Secretary”	The Secretary or Secretaries appointed under these Articles and shall include any person entitled to perform the duties of Secretary temporarily.
“Series A Optional Conversion Right”	The right of Series A Preferred Shareholders, subject to the provisions of the Act and any other applicable law, to convert the Series A Preferred Shares held by them into Ordinary Shares.
“Series A Preferred Shares”	The Series A Preferred shares having the rights, privileges and restrictions set out in Article 7A.
“Series A Preferred Shareholder”	The holder of the Series A Preferred Shares who is registered as a Member of the Company.
“Series A Preferred Dividend”	Shall have the meaning ascribed to it in Article 7A(c).
“Series A Relevant Shares”	Shall have the meaning ascribed to it in Article 7A(j)(iii).
“Series B Conversion Price”	Shall initially be US$50.00 per share, subject to adjustment in accordance with Article 7B(1)(e) and Article 7B(1)(f).
“Series B Issue Date”	The date on which the first Series B Preferred Share is allotted and issued.
“Series B Optional Conversion Right”	The right of Series B Preferred Shareholders, subject to the provisions of Article 7B(1)(e), the Act and any other applicable law, to convert the Series B Preferred Shares held by them into Ordinary Shares.
“Series B Preferred Shares”	The series B convertible preferred shares in the capital of the Company carrying the rights, privileges and benefits set out in Article 7B of these Articles.
“Series B Preferred Shareholders”	The registered holders of the Series B Preferred Shares and “Series B Preferred Shareholder” means any of them.
“Series B Relevant Shares”	Shall have the meaning ascribed to it in Article 7B(1)(e)(iii).
“Series B Conversion Date”	Shall have the meaning ascribed to it in Article 7B(1)(e)(i).
“Series B Conversion Notice”	The written notice to the Company to be given by Series B Preferred Shareholders holding not less than 56% of all issued Series B Preferred Shares for the conversion of the Series B Preferred Shares and lodged at the registered office of the Company pursuant to these Articles.

“Series B Issue Amount”	In relation to a Series B Preferred Share, the subscription price in United States Dollars paid for each Series B Preferred Share (US$50.00 per share), subject to appropriate adjustment in the event of any share dividend, share split, combination or other similar recapitalization with respect to the Series B Preferred Shares.
“Series B Mandatory Conversion Date”	Shall have the meaning ascribed to it in Article 7B(1)(f).
“Series B Preferred Director”	The Director elected by the holders of the Series B Preferred Shares.
“shares”	Means the Ordinary Shares and Preferred Shares in the issued and paid-up capital of the Company.
“Singapore”	The Republic of Singapore.
“S$”	The lawful currency of Singapore.
“Special Resolution”	Has the meaning given in Section 184 of the Act.
“telecommunication system”	Has the meaning as in the Telecommunications Act (Chapter 323) or any statutory modification, amendment or re-enactment thereof for the time being in force.
“treasury share”	Has the meaning given in Section 4 of the Act.
“United States Dollar(s)” or “US$”	The lawful currency of the United States of America.
“Writing” and “Written”	Includes printing, lithography, typewriting and any other mode of representing or reproducing words in a visible form, including electronic communication.
“Year”	Calendar Year.

Words denoting the singular number only shall include the plural and vice versa.

Words denoting the masculine gender only shall include the feminine gender. Words denoting persons shall include corporations.

Save as aforesaid, any word or expression used in the Act and the Interpretation Act, Cap. 1 shall, if not inconsistent with the subject or context, bear the same meaning in these Articles.

All references to the masculine gender shall include references to the feminine and neuter genders and *vice versa.*

BUSINESS

3. Subject to the provisions of the Act, any branch or kind of business may be undertaken by the Directors at such time or times as they shall think fit, and further may be suffered by them to be in abeyance, whether such branch or kind of business may have been actually commenced or not, so long as the Directors may deem it expedient not to commence or proceed with such branch or kind of business.

PRIVATE COMPANY

4. The Company is a private company, and accordingly:

(a) the number of the Members of the Company (not including persons who are in the employment of the Company or of its subsidiary and persons who having been formerly in the

employment of the Company or of its subsidiary were while in the employment and have continued after the determination of that employment to be Members of the Company) shall be limited to fifty provided that for the purposes of this provision where two (2) or more persons hold one (1) or more shares in the Company jointly they shall be treated as a single Member; and

(b) the right to transfer the shares of the Company shall be restricted in the manner hereinafter appearing.

SHARES

5. Except as is otherwise expressly permitted by the Act, the Company shall not give, whether directly or indirectly and whether by means of the making of a loan, the giving of a guarantee, the provision of security, the release of an obligation or the release of a debt or otherwise, any financial assistance for the purpose of, or in connection with, the acquisition or proposed acquisition of shares or units of shares in the Company or its holding company.

6. Save as provided by Section 161 of the Act, no shares may be issued by the Directors without the prior approval of the Company in general meeting but subject thereto and to the provisions of these Articles, the Directors may allot or grant options over or otherwise dispose of the same to such persons on such terms and conditions and at such time as the Company in general meeting may approve.

7. The rights attached to shares issued upon special conditions shall be clearly defined in the Memorandum of Association or these Articles. Without prejudice to any special right previously conferred on the holders of any existing shares or class of shares but subject to the Act and these Articles, shares in the Company may be issued by the Directors and any such shares may be issued with such preferred, deferred, or other special rights or such restrictions, whether in regard to dividend, voting, return of capital or otherwise as the Directors determine.

7A. **SERIES A PREFERRED SHARES**

Subject to the provisions of these Articles, the Company may issue fully paid up Series A Preferred Shares which shall carry the following rights, benefits and privileges and be subject to the following restrictions:

(a) Each Series A Preferred Share shall be issued at an issue price to be determined by the Directors.

(b) Notwithstanding Article 9, the rights, benefits and privileges conferred upon the Series A Preferred Shareholder shall not be deemed to be varied by the creation or issue of further Series A Preferred Shares ranking equally therewith.

(c) The Series A Preferred Shares carry non-cumulative dividend at an annual rate of 15% of the issue price in preference to the Ordinary Shares, payable out of the distributable profits of the Company, when, as and if declared by the Directors (“Series A Preferred Dividend”). All rights with respect to the Series A Preferred Shares to receive Series A Preferred Dividends will terminate on the Series B Mandatory Conversion Date following which the Series A Preferred Shares shall not be entitled to any dividends.

(d) Prior to the occurrence of the Series B Mandatory Conversion Date, the Series A Preferred Shares shall in a liquidation, dissolution or winding up of, or on a return of capital by, the Company or Deemed Liquidation Event rank, as regards the return of capital, equally with the Ordinary Shares. In the event of a liquidation, dissolution or winding up of, or on a return of capital by, the Company or Deemed Liquidation Event which occurs on or after the Series B Mandatory Conversion Date, the Series A Preferred Shareholders shall be entitled to receive from the Company, after all amounts due to be paid to the Series B Preferred Shareholders have been paid as set forth in Article 7B(1)(b)(i)

but before any amounts due to any other class of shares in the capital of the Company have been paid as set forth in Article 7B(1)(b)(ii), US$0.01 per Series A Preferred Share held by such holder.

(e) Save as provided in Articles 7A(c) and 7A(d) above, the Series A Preferred Shares shall not confer the right to any further or other rights to participate in the profits or assets of the Company nor shall they confer a right to participate in any issue of Ordinary Shares.

(f) The Series A Preferred Shareholder:

(i) shall not be entitled to vote at any general meeting (other than under the circumstances set out in Article 7A(f)(iii) below):

(ii) shall be entitled to attend, speak and vote at any class meeting of the Series A Preferred Shareholder; and

(iii) notwithstanding Article 7A(f)(i) above, the Series A Preferred Shareholder shall be entitled to attend (in person or by proxy or attorney or in the case of a corporation, by a representative) any general meeting of the Company and to be counted for the purposes of a quorum at such general meeting and, in a poll thereat, to one vote in respect of each Series A Preferred Share held if (but only if):-

(aa) the Series A Preferred Dividend or any part thereof is in arrear and has remained unpaid for at least 12 months after it has been declared. For the avoidance of doubt, no dividends can be declared unless there are distributable profits that can lawfully be paid. Unless there are such profits that a declaration of dividends can be made, no arrears of dividend would arise and hence no voting rights would arise on the Series A Preferred Shares under these Articles; and/or

(bb) if the matters to be discussed at the meeting relate to or are intended to pass resolutions (i) which would vary or abrogate the rights attached to the Series A Preferred Shares; and (ii) for the winding-up of the Company. For the avoidance of doubt, such resolutions require the unanimous approval of the Series A Preferred Shareholders.

The Series A Preferred Shareholder and the Ordinary Shareholders shall generally vote together and not as a separate class except as expressly provided otherwise in these Articles and except where by law are subject to a class vote.

(g) Save as set out above in this Article 7A, the Series A Preferred Shares shall rank *pari passu* with Ordinary Shares, in every respect.

(h) Notwithstanding anything in these Articles and to the fullest extent permitted by law, the rights, benefits and privileges attached to the Series A Preferred Shares shall not be construed or deemed to be varied or abrogated by any amendment to these Articles, save for any amendment to this Article 7A in respect of the rights, benefits and/or privileges attached to the Series A Preferred Shares.

(i) **RESERVED**

(j) **OPTIONAL CONVERSION**

Each Series A Preferred Share shall be convertible, at the option of the holder thereof, at any time and from time to time, and without the payment of additional consideration by the holder therefor, into such number of fully paid and non-assessable Ordinary Shares at a ratio of one-for-one (subject to appropriate adjustment in the event of any share dividend, share split, combination or other similar recapitalization), and such Series A Preferred Share so converted may not be reissued by the Company. The Series A Optional Conversion Right shall be subject to the following terms:

(i) the Series A Optional Conversion Right shall be exercisable on any Business Day at the election of each Series A Preferred Shareholder upon delivery to the Company of the Series A Optional Conversion Notice together with the share certificates in respect of the Series A Preferred Shares or such other documents or evidence (if any) as the Directors may reasonably require to prove the title and claim of the person exercising such right (or, if such certificates have been lost or destroyed, such evidence of title and such indemnity as the Directors may require). The Series A Optional Conversion Notice shall state the effective date of conversion which shall be at least five (5) days after the date that such notice is provided to the Company and shall be a Business Day (“Series A Optional Conversion Date”). A Series A Optional Conversion Notice once given may not be withdrawn without the consent in writing of the Company;

(ii) upon conversion, such Series A Preferred Shares shall be converted into Ordinary Shares credited as fully paid and, from the Series A Optional Conversion Date, the rights attached to such Series A Preferred Shares are altered and such Series A Preferred Shares shall cease to have any preference or priority set out in this Article 7A and shall rank *pari passu* in all respects with the Ordinary Shares then in issue (save for any dividends, rights or other distributions the record date of which is before the relevant Series A Optional Conversion Date);

(iii) conversion of such Series A Preferred Shares as are due to be converted as aforesaid on any Series A Optional Conversion Date (the "Series A Relevant Shares") shall be effected in such manner as the Directors shall, subject to these Articles and as the Act or other applicable laws or regulations may allow, from time to time determine;

(iv) fractions of Ordinary Shares shall not be issued on conversion. In lieu of any fractional shares to which the holder would otherwise be entitled, the Company shall pay cash equal to such fraction multiplied by the fair market value of an Ordinary Share as determined in good faith by the Board of Directors. Whether or not fractional shares would be issuable upon such conversion shall be determined on the basis of the total number of Series A Preferred Shares the holder is at the time converting into Ordinary Shares and the aggregate number of Ordinary Shares issuable upon such conversion;

(v) the Company shall, within five (5) Business Days of the relevant Series A Optional Conversion Date and in exchange for the certificates in respect of the Series A Relevant Shares, deliver the share certificates in respect of the Ordinary Shares into which such Series A Relevant Shares are converted, and any balancing certificate for any Series A Preferred Shares which remain unconverted to the holder of the Series A Relevant Shares.

Any certificate to be despatched by the Company pursuant to this Article 7A(j)(v) shall be sent by registered post at the risk of the holder of the Series A Relevant Shares.

All certificates relating to the Series A Preferred Shares which have been delivered for conversion shall upon issue of the Ordinary Shares be cancelled forthwith.

(vi) appropriate and similar adjustments shall be made to the Series A Optional Conversion Right from time to time by the Directors in the event of any subdivision, consolidation, bonus issue or other distributions of Ordinary Shares or combination of shares or rights issue or other change in capital structure of the Company such that upon conversion of the Series A Preferred Shares following such subdivision, consolidation, bonus issue, distribution, combination, rights issue or other change, the holder of such Series A Preferred Share shall be entitled to receive a number of Ordinary Shares or other securities equal to that which a holder of the number of Ordinary Shares deliverable upon conversion of a Series A Preferred Share immediately prior to the effectiveness of such subdivision, consolidation, bonus issue, distribution, combination, rights issue or other change would have been entitled to receive as a result of such subdivision, consolidation, bonus issue, distribution, combination, rights issue or other change.

7B. SERIES B PREFERRED SHARES

7B(1) The Company may allot and issue Series B Preferred Shares, at such issue price and on such terms and conditions as the Directors may determine, which shall carry the following rights, benefits and privileges and be subject to the following restrictions:

(a) **DIVIDEND**

The Company shall not declare, pay or set aside any dividends on the share capital of the Company (including the Series A Preferred Dividend) unless (in addition to the obtaining of any consents required elsewhere in these Articles) the holders of the issued Series B Preferred Shares shall first receive, or simultaneously receive, a dividend on each issued Series B Preferred Share in an amount at least equal to (i) in the case of a dividend on the Ordinary Shares or any class or series of shares that is convertible into Ordinary Shares (including the Series A Preferred Dividend), that dividend per Series B Preferred Share as would equal the product of (A) the dividend payable on each share determined, if applicable, as if all shares of such class or series of shares had been converted into Ordinary Shares and (B) the number of Ordinary Shares issuable upon conversion of a Series B Preferred Share, in each case calculated on the record date for determination of holders entitled to receive such dividend or (ii) in the case of a dividend on any class or series of shares that is not convertible into Ordinary Shares, at a rate per Series B Preferred Share determined by (A) dividing the amount of the dividend payable on each share of such class or series of shares by the original issuance price of such class or series of shares (subject to appropriate adjustment in the event of any share dividend, share split, combination or other similar recapitalization with respect to such class or series of shares) and (B) multiplying such fraction by an amount equal to the Series B Issue Amount; provided that, if the Company declares, pays or sets aside, on the same date, a dividend on shares of more than one class or series of shares, the dividend payable to the Series B Preferred Shareholders pursuant to this Article 7B(1)(a) shall be calculated based upon the dividend on the class or series of shares that would result in the highest dividend in respect of the Series B Preferred Shares.

(b) **CAPITAL**

On a liquidation, dissolution or winding up of, or on a return of capital by, the Company or a Deemed Liquidation Event (but not on conversion or redemption of the Series B Preferred Shares or winding-up on dissolution pursuant to Article 7B(1)(j)), the assets of the Company available for distribution among the Members shall be applied as follows:

(i) firstly, in paying to each Series B Preferred Shareholder, an amount per share equal to the greater of, which greater amount shall be the "Series B Liquidation Amount":

(aa) the aggregate of (1) the Series B Issue Amount for all Series B Preferred Shares held by him; and (2) any dividends declared but unpaid thereon; and

(bb) such amount which such Series B Preferred Shareholder would have otherwise received if all the issued Series B Preferred Shares had been converted into Ordinary Shares immediately prior to such liquidation, dissolution or winding up in accordance with these Articles;

(ii) secondly, the balance of such assets and profits shall belong to and be distributed among the holders of any class of shares in the capital of the Company other than the Series B Preferred Shares and shares not entitled to participate in such assets, in accordance with respective rights attaching thereto.

The Company shall not have the power to effect a Deemed Liquidation Event unless the definitive agreement governing such Deemed Liquidation Event provides that the

consideration payable to the Members of the Company shall be allocated among the Members in accordance with this Article 7B(1)(b). The amount deemed paid or distributed to the Members upon any such Deemed Liquidation Event shall be the cash or the value of the property, rights or securities paid or distributed to the Members by the Company or the acquiring person, firm or other entity. The value of such property, rights or securities shall be determined in good faith by the Board of Directors.

In the event of a Deemed Liquidation Event, if any portion of the consideration payable to the shareholders of the Company is payable only upon satisfaction of contingencies (the "Additional Consideration"), the definitive agreement governing such Deemed Liquidation Event shall provide that (a) the portion of such consideration that is not Additional Consideration (such portion, the "Initial Consideration") shall be allocated among the shareholders of the Company in accordance with Articles 7B(1)(b)(i) and 7B(1)(b)(ii) as if the Initial Consideration were the only consideration payable in connection with such Deemed Liquidation Event; and (b) any Additional Consideration which becomes payable to the shareholders of the Company upon satisfaction of such contingencies shall be allocated among the shareholders of the Company in accordance with Articles 7B(1)(b)(i) and 7B(1)(b)(ii) after taking into account the previous payment of the Initial Consideration as part of the same transaction. For the purposes of this paragraph, consideration placed into escrow or retained as holdback to be available for satisfaction of indemnification or similar obligations in connection with such Deemed Liquidation Event shall be deemed to be Additional Consideration.

(c) **DEFAULT IN PAYMENT OR PARTIAL PAYMENT**

If by reason of any provision of the Act, the Company is unable to make payment of any amount due in respect of the Series B Preferred Shares, then the Company shall from time to time (subject to the maximum amount and extent permitted by law, and on the earliest date on which such payments may lawfully be made) make payments on account of the amount so owing on a *pro rata* basis until such amount has been paid in full.

(d) **VOTING**

(i) On any matter presented to the shareholders of the Company for their action or consideration at any meeting of shareholders of the Company (or by written consent of shareholders in lieu of meeting), each Series B Preferred Shareholder shall be entitled to cast the number of votes equal to the number of whole Ordinary Shares into which the Series B Preferred Shares held by such shareholder are convertible as of the record date for determining shareholders entitled to vote on such matter. Except as provided by law or by the other provisions of these Articles, Series B Preferred Shareholders shall vote together with the Ordinary Shareholders as a single class.

(ii) The holders of record of the Series B Preferred Shares, exclusively and as a separate class, shall be entitled to elect one (1) director of the Company and the holders of record of the Ordinary Shares, exclusively and as a separate class, shall be entitled to elect three (3) directors of the Company. Any director elected as provided in the preceding sentence may be removed without cause by, and only by, the affirmative vote of the holders of the shares of the class or series of shares entitled to elect such director or directors, given either at a special meeting of such shareholders duly called for that purpose or pursuant to a written consent of the shareholders of that class or series of shares. If the holders of Series B Preferred Shares or Ordinary Shares, as the case may be, fail to elect a sufficient number of directors to fill all directorships for which they are entitled to elect directors, voting exclusively and as a separate class, pursuant to the first sentence of this Article 7B(1)(d)(ii), then any directorship not so filled shall remain vacant until such time as the holders of the Series B Preferred Shares or Ordinary Shares, as the case may be, elect a person to fill such directorship by vote or written consent in lieu of a meeting; and no such directorship may be filled by shareholders of the Company other than by the shareholders of the Company that are

entitled to elect a person to fill such directorship, voting exclusively and as a separate class. The holders of record of the Ordinary Shares and of any other class or series of voting shares (including the Series B Preferred Shares), exclusively and voting together as a single class, shall be entitled to elect the balance of the total number of directors of the Company. At any meeting of shareholders held for the purpose of electing a director, the presence in person or by proxy of the holders of a majority of the issued shares of the class or series entitled to elect such director shall constitute a quorum for the purpose of electing such director. Except as otherwise provided in this Article 7B(1)(d)(ii), a vacancy in any directorship filled by the holders of any class or series shall be filled only by vote or written consent in lieu of a meeting of the holders of such class or series or by any remaining director or directors elected by the holders of such class or series pursuant to this Article 7B(1)(d)(ii).

(iii) The Company shall not, either directly or indirectly by amendment, merger, consolidation or otherwise, do any of the following without (in addition to any other vote required by law or these Articles) the written consent or affirmative vote of the holders of at least (i) 56% of the then issued Series B Preferred Shares and (ii) a majority of the then issued Ordinary Shares, given in writing or by vote at a meeting, consenting or voting together as a class on an as-converted basis, and any such act or transaction entered into without such consent or vote shall be null and void *ab initio*, and of no force or effect:

(aa) liquidate, dissolve or wind-up the business and affairs of the Company, effect any merger or consolidation or any other Deemed Liquidation Event, or consent to any of the foregoing;

(bb) create, or authorize the creation of, or issue, or authorize the issuance of any debt security, or permit any subsidiary to take any such action with respect to any debt security, other than equipment leases or bank lines of credit, unless such debt security has received the prior approval of the Board of Directors, including the Series B Preferred Director;

(cc) create, or hold shares in the capital of, any subsidiary that is not wholly owned (either directly or through one or more other subsidiaries) by the Company, or sell, transfer or otherwise dispose of any shares in the capital of any direct or indirect subsidiary of the Company, or permit any direct or indirect subsidiary to sell, lease, transfer, exclusively license or otherwise dispose (in a single transaction or series of related transactions) of all or substantially all of the assets of such subsidiary; or

(dd) increase or decrease the authorized number of directors constituting the Board of Directors.

(iv) The Company shall not, either directly or indirectly by amendment, merger, consolidation or otherwise, do any of the following without (in addition to any other vote required by law or these Articles) the written consent or affirmative vote of the holders of at least 56% of the then issued Series B Preferred Shares, given in writing or by vote at a meeting, consenting or voting (as the case may be) separately as a class on an as-converted basis, and any such act or transaction entered into without such consent or vote shall be null and void *ab initio*, and of no force or effect:

(aa) amend, alter or repeal any provision of these Articles in a manner that adversely affects the powers, preferences or rights of the Series B Preferred Shares;

(bb) create, or authorize the creation of, any additional class or series in the share capital of the Company unless the same ranks junior to the Series B Preferred Shares with respect to the distribution of assets on the liquidation, dissolution or winding up of the Company, the payment of dividends and rights of redemption,

(cc) issue, or authorize the issuance of, more than a total of 5,400,000 Ordinary Shares, 965,300 Series A Preferred Shares or 1,320,000 Series B Preferred Shares;

(dd) purchase or redeem (or permit any subsidiary to purchase or redeem) or pay or declare any dividend or make any distribution on, any shares in the capital of the Company, other than (i) dividends or distributions on the Series B Preferred Shares as expressly authorized herein, (ii) dividends or other distributions payable on the Ordinary Shares solely in the form of additional Ordinary Shares, or (iii) repurchases of shares from former employees, officers, directors, consultants or other persons who performed services for the Company or any subsidiary in connection with the cessation of such employment or service at the lower of the original purchase price or the then-current fair market value thereof; or

(ee) liquidate, dissolve, or wind-up the affairs of the Company, or effect any merger or consolidation or any other Deemed Liquidation Event within 18 months following the closing of the Series B Preferred Share Financing, which would result in gross proceeds to the holders of Series B Preferred Shares equal to an amount per share less than the Series B Issue Amount.

(v) Ordinary Shareholders are entitled to one vote for each Ordinary Share held at all meetings of shareholders (and written actions in lieu of meetings); provided, however, that, except as otherwise required by law, Ordinary Shareholders, as such, shall not be entitled to vote on any amendment to these Articles that relates solely to the terms of one or more issued series of Preferred Shares if the holders of such affected series are entitled, either separately or together with the holders of one or more other such series, to vote thereon pursuant to these Articles or the Act.

(vi) The provisions of these Articles relating to votes of Members shall (subject to and except to the extent inconsistent with this Article 7B) apply *mutatis mutandis* to votes of the Series B Preferred Shareholders at any general meeting or the class meeting of the Series B Preferred Shareholders, as the case may be.

(e) **OPTIONAL CONVERSION**

Each Series B Preferred Share shall be convertible, at the option of the holder thereof, at any time and from time to time, and without the payment of additional consideration by the holder therefor, into such number of fully paid and non-assessable Ordinary Shares as is determined by dividing the Series B Issue Amount by the Series B Conversion Price in effect at the time of conversion and such Series B Preferred Shares so converted may not be reissued by the Company. The Series B Conversion Price and the rate at which the Series B Preferred Shares may be converted into Ordinary Shares shall be subject to adjustment as provided in this Article 7B(1)(e). The Series B Optional Conversion Right shall be subject to the following terms:

(i) the Series B Optional Conversion Right shall be exercisable on any Business Day at the election of each Series B Preferred Shareholder upon delivery to the Company of the Series B Conversion Notice together with the share certificates in respect of the Series B Preferred Shares or such other documents or evidence (if any) as the Directors may reasonably require to prove the title and claim of the person exercising such right (or, if such certificates have been lost or destroyed, such evidence of title and such indemnity as the Directors may require). The Series B Conversion Notice shall state the effective date of conversion which shall be at least five (5) days after the date that such notice is provided to the Company ("Series B Conversion Date"). A Series B Conversion Notice once given may not be withdrawn without the consent in writing of the Company;

(ii) upon conversion, such Series B Preferred Shares shall be converted into Ordinary Shares credited as fully paid and, from the Series B Conversion Date, the rights attached to such Series B Preferred Shares are altered and such Series B Preferred Shares shall cease to have any preference or priority set out in this Article 7B and shall rank *pari passu* in all respects with the Ordinary Shares then in issue (save for any dividends, rights or other distributions the record date of which is before the relevant Series B Conversion Date);

(iii) conversion of such Series B Preferred Shares as are due to be converted as aforesaid on any Series B Conversion Date (the "Series B Relevant Shares") shall be effected in such manner as the Directors shall, subject to these Articles and as the Act or other applicable laws or regulations may allow, from time to time determine;

(iv) fractions of Ordinary Shares shall not be issued on conversion. In lieu of any fractional shares to which the holder would otherwise be entitled, the Company shall pay cash equal to such fraction multiplied by the fair market value of an Ordinary Share as determined in good faith by the Board of Directors. Whether or not fractional shares would be issuable upon such conversion shall be determined on the basis of the total number of Series B Preferred Shares the holder is at the time converting into Ordinary Shares and the aggregate number of Ordinary Shares issuable upon such conversion;

(v) the Company shall, within five (5) Business Days of the relevant Series B Conversion Date and in exchange for the certificates in respect of the Series B Relevant Shares, (1) deliver the share certificates in respect of the Ordinary Shares into which such Series B Relevant Shares are converted, and any balancing certificate for any Series B Preferred Shares which remain unconverted to the holder of the Series B Relevant Shares, (2) pay in cash such amount as provided in clause (iv) above in lieu of any fraction of an Ordinary Share otherwise issuable upon such conversion and (3) pay all declared but unpaid dividends on the Series B Preferred Shares converted.

Any certificate to be despatched by the Company pursuant to this Article 7B(1)(e)(v) shall be sent by registered post at the risk of the holder of the Series B Relevant Shares.

All certificates relating to the Series B Preferred Shares which have been delivered for conversion shall upon issue of the Ordinary Shares be cancelled forthwith.

(vi) appropriate and similar adjustments shall be made to the Series B Conversion Price and the Series B Optional Conversion Right from time to time by the Directors in the event of any subdivision, consolidation, bonus issue or other distributions of Ordinary Shares or combination of shares or rights issue or other change in capital structure of the Company such that upon conversion of the Series B Preferred Shares following such subdivision, consolidation, bonus issue, distribution, combination, rights issue or other change, the holder of such Series B Preferred Share shall be entitled to receive a number of Ordinary Shares or other securities equal to that which a holder of the number of Ordinary Shares deliverable upon conversion of a Series B Preferred Share immediately prior to the effectiveness of such subdivision, consolidation, bonus issue, distribution, combination, rights issue or other change would have been entitled to receive as a result of such subdivision, consolidation, bonus issue, distribution, combination, rights issue or other change.

(vii) For purposes of this Article 7B(1)(e) and Article 7B(1)(f), the following definitions shall apply:

"Option" means rights, options or warrants to subscribe for, purchase or otherwise acquire Ordinary Shares or Convertible Securities.

"Convertible Securities" shall mean any evidences of indebtedness, shares or other securities directly or indirectly convertible into or exchangeable for Ordinary Shares, but excluding Options.

"Additional Ordinary Shares" shall mean all Ordinary Shares issued (or, deemed to be issued) by the Company after the Series B Issue Date, other than (1) the Ordinary Shares listed below, and (2) the Ordinary Shares deemed to be issued pursuant to the Options and Convertible Securities listed below (clauses (1) and (2), collectively, "Exempted Securities"):

(aa) Ordinary Shares, Options or Convertible Securities issued as a dividend or distribution on the Preferred Shares;

(bb) Ordinary Shares, Options or Convertible Securities issued by reason of a dividend, share split, split-up or other distribution on Ordinary Shares;

(cc) Ordinary Shares or Options issued to employees or directors of, or consultants or advisors to, the Company or any of its subsidiaries pursuant to a plan, agreement or arrangement approved by the Board of Directors of the Company, including the Series B Preferred Director;

(dd) Ordinary Shares or Convertible Securities actually issued upon the exercise of Options or Ordinary Shares actually issued upon the conversion or exchange of Convertible Securities, in each case provided such issuance is pursuant to the terms of such Option or Convertible Security;

(ee) Ordinary Shares, Options or Convertible Securities issued to banks, equipment lessors or other financial institutions, or to real property lessors, pursuant to a debt financing, equipment leasing or real property leasing transaction approved by the Board of Directors of the Company, including the Series B Preferred Director;

(ff) Ordinary Shares, Options or Convertible Securities issued to suppliers or third party service providers in connection with the provision of goods or services pursuant to transactions approved by the Board of Directors of the Company, including the Series B Preferred Director;

(gg) Ordinary Shares, Options or Convertible Securities issued pursuant to the acquisition of another corporation by the Company by merger, purchase of substantially all of the assets or other reorganization or to a joint venture agreement, provided that such issuances are approved by the Board of Directors of the Company, including the Series B Preferred Director; or

(hh) Ordinary Shares, Options or Convertible Securities issued in connection with sponsored research, collaboration, technology license, development, OEM, marketing or other similar agreements or strategic partnerships approved by the Board of Directors of the Company, including the Series B Preferred Director.

(viii) in the event the Company shall at any time after the Series B Issue Date issue Additional Ordinary Shares (including Additional Ordinary Shares deemed to be issued), without consideration or for a consideration per share less than the Series B Conversion Price in effect immediately prior to such issue, then the Series B Conversion Price shall be reduced, concurrently with such issue, to a price (calculated to the nearest one-hundredth of a cent) determined in accordance with the following formula:

$CP_2 = CP_1 * (A + B) \div (A + C)$.

For purposes of the foregoing formula, the following definitions shall apply:

"CP_2" shall mean the Series B Conversion Price in effect immediately after such issue of Additional Ordinary Shares;

"CP_1" shall mean the Series B Conversion Price in effect immediately prior to such issue of Additional Ordinary Shares;

"A" shall mean the number of Ordinary Shares in the share capital of the Company issued immediately prior to such issue of Additional Ordinary Shares (treating for this purpose as issued all Ordinary Shares issuable upon exercise of Options outstanding immediately prior to such issue or upon conversion or exchange of Convertible Securities (including the Series B Preferred Shares) issued (assuming exercise of any outstanding Options therefor) immediately prior to such issue);

"B" shall mean the number of Ordinary Shares in the share capital of the Company that would have been issued if such Additional Ordinary Shares had been issued at a price per share equal to CP_1 (determined by dividing the aggregate consideration received by the Company in respect of such issue by CP_1); and

"C" shall mean the number of such Additional Ordinary Shares issued in such transaction.

(ix) No adjustment in the Series B Conversion Price shall be made as the result of the issuance or deemed issuance of Additional Ordinary Shares if the Company receives written notice from the holders of at least 56% of the then outstanding Series B Preferred Shares agreeing that no such adjustment shall be made as the result of the issuance or deemed issuance of such Additional Ordinary Shares.

(x) The Company shall pay any and all issue and other similar taxes that may be payable in respect of any issuance or delivery of Ordinary Shares upon conversion of the Series A Preferred Shares pursuant to this Article 7B(1)(e). The Company shall not, however, be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of Ordinary Shares in a name other than that in which the Series A Preferred Shares so converted were registered, and no such issuance or delivery shall be made unless and until the person or entity requesting such issuance has paid to the Company the amount of any such tax or has established, to the satisfaction of the Company, that such tax has been paid

(xi) In each case of an adjustment or readjustment of the Series B Conversion Price, the Company, at its expense, shall cause its Chief Financial Officer to compute such adjustment or readjustment in accordance with the provisions hereof and prepare a certificate showing such adjustment or readjustment, and shall timely deliver such certificate to each registered holder of the Series B Preferred Shares at the holder's address as shown in the Company's books.

(f) **MANDATORY CONVERSION**

(i) Upon the earlier of (a) the closing of the sale of Ordinary Shares to the public at a price per share of at least the Series B Issue Amount (subject to appropriate adjustment in the event of any share dividend, share split, combination or other similar recapitalization), in a firm-commitment underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended, resulting in at least US$50 million in gross proceeds to the Company, or (b) the date and time, or

the occurrence of an event, specified by vote or written consent of the holders of at least 56% of the then issued Series B Preferred Shares (the time of such closing or the date and time specified or the time of the event specified in such vote or written consent is referred to herein as the "Series B Mandatory Conversion Date"), then (i) all issued Series B Preferred Shares shall automatically be converted into such number of fully paid and non-assessable Ordinary Shares as is determined by dividing the Series B Issue Amount by the Series B Conversion Price in effect at the time of the mandatory conversion, and (ii) such shares may not be reissued by the Company. The Series B Conversion Price and the rate at which the Series B Preferred Shares may be converted into Ordinary Shares shall be subject to adjustment as provided in Article 7B(1)(e). The Series B Preferred Share mandatory conversion feature shall be subject to the following terms.

(ii) All Series B Preferred Shareholders shall be sent written notice of the Series B Mandatory Conversion Date and the place designated for mandatory conversion of all such shares of Series B Preferred Shares. Such notice need not be sent in advance of the Series B Mandatory Conversion Date. Upon receipt of such notice, each Series B Preferred Shareholder holding shares in certificated form shall surrender his, her or its certificate or certificates (or, if such holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Company to indemnify the Company against any claim that may be made against the Company on account of the alleged loss, theft or destruction of such certificate) to the Company at the place designated in such notice. If so required by the Company, any certificates surrendered for conversion shall be endorsed or accompanied by written instrument or instruments of transfer, in form satisfactory to the Company, duly executed by the registered holder or by his, her or its attorney duly authorized in writing. All rights with respect to the Series B Preferred Shares converted, including the rights, if any, to receive notices and vote (other than as a holder of Ordinary Shares), will terminate on the Series B Mandatory Conversion Date (notwithstanding the failure of the holder or holders thereof to surrender any certificates at or prior to such time), except only the rights of the holders thereof, upon surrender of any certificate or certificates of such holders (or lost certificate affidavit and agreement) therefor, to receive the items provided for in the next sentence. As soon as practicable after the Series B Mandatory Conversion Date and, if applicable, the surrender of any certificate or certificates (or lost certificate affidavit and agreement) for Series B Preferred Shares, the Company shall issue and deliver to such holder, or to his, her or its nominees, a certificate or certificates for the number of full Ordinary Shares issuable on such conversion in accordance with the provisions hereof and;

(iii) such converted Series B Preferred Shares shall be retired and cancelled and may not be reissued as shares of such series;

(iv) fractions of Ordinary Shares shall not be issued on conversion. In lieu of any fractional shares to which the holder would otherwise be entitled, the Company shall pay cash equal to such fraction multiplied by the fair market value of an Ordinary Share as determined in good faith by the Board of Directors. Whether or not fractional shares would be issuable upon such conversion shall be determined on the basis of the total number of Series A Preferred Shares the holder is at the time converting into Ordinary Shares and the aggregate number of Ordinary Shares issuable upon such conversion;

(v) appropriate and similar adjustments shall be made to the Series B Conversion Price and the conversion right set forth in this Article 7B(1)(f) from time to time by the Directors in the event of any subdivision, consolidation, bonus issue or other distributions of Ordinary Shares or combination of shares or rights issue or other change in capital structure of the Company such that upon conversion of the Series B Preferred Shares following such subdivision, consolidation, bonus issue, distribution, combination, rights issue or other change, the holder of such Series B Preferred Share shall be entitled to receive a number of Ordinary Shares or other securities equal to that

which a holder of the number of Ordinary Shares deliverable upon conversion of a Series B Preferred Share immediately prior to the effectiveness of such subdivision, consolidation, bonus issue, distribution, combination, rights issue or other change would have been entitled to receive as a result of such subdivision, consolidation, bonus issue, distribution, combination, rights issue or other change; and

(vi) the Company shall pay any and all issue and other similar taxes that may be payable in respect of any issuance or delivery of Ordinary Shares upon conversion of the Series A Preferred Shares pursuant to this Article 7B(1)(f). The Company shall not, however, be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of Ordinary Shares in a name other than that in which the Series A Preferred Shares so converted were registered, and no such issuance or delivery shall be made unless and until the person or entity requesting such issuance has paid to the Company the amount of any such tax or has established, to the satisfaction of the Company, that such tax has been paid.

(g) **MEETINGS**

Subject to applicable laws, Series B Preferred Shareholders owning a majority of the Series B Preferred Shares shall constitute the quorum at a meeting of the Series B Preferred Shareholders or in the event there being only one (1) Series B Preferred Shareholder, such Series B Preferred Shareholder or its duly authorised representative shall constitute the quorum at a meeting of the Series B Preferred Shareholders. The provisions of these Articles relating to general meetings of the Company, notice of and proceedings at general meetings and votes of members shall (subject to and except to the extent inconsistent with this Article 7B) apply *mutatis mutandis* to any separate class meeting of the Series B Preferred Shareholders.

(h) **FURTHER PREFERRED SHARES**

Without prejudice to the generality of Article 7B(3) below, the issue by the Company of shares which rank in any respect *pari passu* with, or in priority to the Series B Preferred Shares, shall be deemed to constitute a variation of the rights attached to the Series B Preferred Shares.

(i) **TRANSFERS, REGISTRATION AND REPLACEMENT**

The Series B Preferred Shares will be in registered form and the Company shall maintain a Register of Series B Preferred Shareholders. The provisions of these Articles relating to the registration, transfer, transmission, certificates and replacement thereof applicable to Ordinary Shares shall apply *mutatis mutandis* to the Series B Preferred Shares.

(j) **SUBSTITUTION SECURITIES**

In the event of a winding-up or dissolution of the Company pursuant to reconstruction, amalgamation, merger or consolidation, the resultant corporate entity responsible for the liabilities of the Company with respect of the Series B Preferred Shares shall issue such securities in substitution and replacement of the Series B Preferred Shares and on such terms as shall be approved by Series B Preferred Shareholders in accordance with Article 7B(3) unless the terms of such securities in substitution are no less favourable than the terms of the Series B Preferred Shares. As a condition to any such winding-up or dissolution, the Company shall procure that the resultant corporate entity shall (in favour of the Series B Preferred Shareholders) undertake to comply with the provisions of Articles 7B(1) to 7B(5) (both inclusive).

(k) **PAYMENTS**

All payments or distributions with respect to the Series B Preferred Shares held jointly by two (2) or more persons shall be paid or made to whichever of such persons is named first in the

Register of Series B Preferred Shareholders and the making of any payment or distribution in accordance with this Article 7B(1)(k) shall discharge the liability of the Company in respect thereof.

(l) **PRESCRIPTION**

Any Series B Preferred Shareholder who has failed to claim dividends, distributions or other property or rights within six (6) years of their having been made available to him will not thereafter be able to claim such dividends, distributions or other property or rights which shall be forfeited and shall revert to the Company. The Company shall retain such distributions or other property or rights but shall not at any time be a trustee in respect of any dividends, distributions or other property or rights nor be accountable for any income or other benefits derived therefrom.

7B(2) Any consent, approval or sanction of the Series B Preferred Shareholders required under this Article 7B and/or any variation, abrogation, devaluation, dilution or other limitation of the rights of the Series B Preferred Shareholders as set out in Articles 7B(1) to 7B(4) (both inclusive) shall require the approval of Series B Preferred Shareholders owning 56% of the Series B Preferred Shares in a separate class meeting of the Series B Preferred Shareholders; provided, however, if any consent, approval or sanction would adversely change the rights of a Series B Preferred Shareholder in a manner disproportionate to the rights of the Series B Preferred Shareholders approving such consent, approval or sanction, then the consent of such Series B Preferred Shareholder shall also be required.

7B(3) Any notice or other document may be given by the Company to any Series B Preferred Shareholder either personally or by sending it through the post in a prepaid letter or by facsimile transmission or other tangible and legible form of electronic or similar form of communication addressed to such Series B Preferred Shareholder at his address as appearing in the Register of Series B Preferred Shareholders. All notices with respect to any Series B Preferred Shares to which persons are jointly entitled shall be given to whichever of such person is named first in the Register of Series B Preferred Shareholders, and notice so given shall be sufficient notice to all the holders of such Series B Preferred Shares. Any notice or other document, if sent by post, shall be deemed to have been served or delivered 5 days after the time when the letter containing the same is posted, and in proving such service it shall be sufficient to prove that the letter containing the notice or document was properly addressed and served by prepaid post. Any notice or other document, if served by facsimile transmission or other tangible and legible form of electronic or similar form of communication shall be deemed to have been served upon receipt thereof. Production of a copy of a notice sent by facsimile transmission or other tangible and legible form of electronic or similar form of communication bearing an acknowledgement of successful transmission in accordance with normal procedures under the system in use shall be sufficient proof of receipt thereof.

7B(4) In the event of any conflict or inconsistency between the provisions of this Article 7B and the other provisions of these Articles, then (in favour of the Series B Preferred Shareholders) the provisions of this Article 7B shall prevail.

7C. **RESERVED**

8. If at any time the share capital is divided into different classes, the rights attached to any class (unless otherwise provided by the terms of issue of the shares of that class) may, subject to the provisions of the Act, whether or not the Company is being wound up, be varied or abrogated with the sanction of a Special Resolution passed at a separate general meeting of the holders of shares of the class and to every such Special Resolution the provisions of Section 184 of the Act shall with such adaptations as are necessary apply. To every such separate general meeting the provisions of these Articles relating to general meetings shall mutatis mutandis apply; but so that the necessary quorum shall be two (2) persons (unless all the shares of the class are held by one (1) person whereupon no quorum is applicable) at least holding or representing by proxy or by attorney one-third

of the issued shares of the class and that any holder of shares of the class present in person or by proxy or by attorney may demand a poll provided always that where the necessary consent for such a Special Resolution is not obtained at the meeting, consent in writing if obtained from the holders of three-fourths of the issued shares of the class concerned, within two (2) months of the Meeting shall be as valid and effectual as a Special Resolution, carried at the meeting.

9. The rights conferred upon the holders of the shares of any class issued with preferred or other rights shall, unless otherwise expressly provided by the terms of issue of the shares of the class or by these Articles as are in force at the time of such issue, be deemed to be varied by the creation or issue of further shares ranking equally therewith.

10. The Company may exercise the powers of paying commissions or brokerage on any issue of shares at such rate or amount and in such manner as the Directors may deem fit. Such commissions or brokerage may be satisfied by the payment of cash or the allotment of fully or partly paid shares or partly in one way and partly in the other.

11. If any shares of the Company are issued for the purpose of raising money to defray the expenses of the construction of any works or the provisions of any plant which cannot be made profitable for a long period, the Company may, subject to the conditions and restrictions mentioned in the Act pay interest on so much of the share capital as is for the time being paid up and may charge the same to capital as part of the cost of the construction or provision.

12. Except as required by law, no person shall be recognised by the Company as holding any share upon any trust and the Company shall not be bound by or compelled in any way to recognise (even when having notice thereof) any equitable, contingent, future or partial interest in any share or any interest in any fractional part of a share or (except only as by these Articles or by law otherwise provided) any other rights in respect of any share, except an absolute right to the entirety thereof in the registered holder.

13. If two (2) or more persons are registered as joint holders of any share any one (1) of such persons may give effectual receipts for any dividend payable in respect of such share and the joint holders of a share shall, subject to the provision of the Act, be severally as well as jointly liable for the payment of all instalments and calls and interest due in respect of such shares. Such joint holders shall be deemed to be one (1) Member and the delivery of a certificate for a share to one (1) of several joint holders shall be sufficient delivery to all such holders.

14. No person shall be recognised by the Company as having title to a fractional part of a share or otherwise than as the sole or a joint holder of the entirety of such share.

15. If by the conditions of allotment of any shares the whole or any part of the amount of the issue price thereof shall be payable by instalments every such instalment shall, when due, be paid to the Company by the person who for the time being shall be the registered holder of the share or his personal representatives, but this provision shall not affect the liability of any allottee who may have agreed to pay the same.

16. The certificate of title to shares in the capital of the Company shall be issued under the Seal in such form as the Directors shall from time to time prescribe and shall bear the autographic or facsimile signatures of a Director and the Secretary or a second Director or some other person appointed by the Directors, and shall specify the number and class of shares to which it relates and the amounts paid thereon. The facsimile signatures may be reproduced by mechanical or other means provided the method or system of reproducing signatures has first been approved by the Director of the Company.

17. Every person whose name is entered as a Member in the Register shall be entitled within two (2) months after allotment or within one (1) month after the lodgement of any transfer to one (1) certificate for all his shares of any one (1) class or to several certificates in reasonable denominations each for a part of the shares so allotted or transferred. Where a Member transfers part only of the shares comprised in a certificate or where a Member requires the Company to cancel any certificate or certificates and issue new certificates for the purpose of subdividing his

holding in a different manner the old certificate or certificates shall be cancelled and a new certificate or certificates for the balance of such shares issued in lieu thereof and the Member shall pay a fee not exceeding S$2/- for each such new certificate as the Directors may determine.

18. If any certificate or other document of title to shares or debentures be worn out or defaced, then upon production thereof to the Directors, they may order the same to be cancelled and may issue a new certificate in lieu thereof. For every certificate so issued there shall be paid to the Company the amount of the proper duty, with which such certificate is chargeable under any law for the time being in force relating to stamps together with a further fee not exceeding S$2/- as the Directors may determine. Subject to the provisions of the Act and the requirements of the Directors thereunder, if any certificate or document be lost or destroyed or stolen, then upon proof thereof to the satisfaction of the Directors and on such indemnity as the Directors deem adequate being given, and on the payment of the amount of the proper duty with which such certificate or document is chargeable under any law for the time being in force relating to stamps together with a further fee not exceeding S$2/- as the Directors may determine, a new certificate or document in lieu thereof shall be given to the person entitled to such lost or destroyed or stolen certificate or document.

RESTRICTION ON TRANSFER OF SHARES

19. Subject to the restrictions of these Articles and any exceptions to such restrictions contained therein, any Member may transfer all or any of his shares, but every transfer must be in writing and in the usual common form, or in any other form which the Directors may approve. The instrument of transfer of a share shall be signed both by the transferor and by the transferee, and by the witness or witnesses thereto and the transferor shall be deemed to remain the holder of the share until the name of the transferee is entered in the Register in respect thereof. Shares of different classes shall not be comprised in the same instrument of transfer.

20. All instruments of transfer which shall be registered shall be retained by the Company, but any instrument of transfer which the Directors may refuse to register shall (except in any case of fraud) be returned to the party presenting the same.

21. No share shall in any circumstances be transferred to any infant or bankrupt or person of unsound mind.

22. Intentionally omitted.

23. The Directors may decline to register any instrument of transfer unless:

(a) such fee not exceeding S$2/- or such other sum as the Directors may from time to time require under the provisions of these Articles, is paid to the Company in respect thereof; and

(b) the instrument of transfer is deposited at the Office or at such other place (if any) as the Directors may appoint accompanied by the certificates of the shares to which it relates and such other evidence as the Directors may reasonably require to show the right of the transferor to make the transfer and, if the instrument of transfer is executed by some other person on his behalf, the authority of the person so to do.

24. The Company shall provide a book to be called “Register of Transfers” which shall be kept under the control of the Directors, and in which shall be entered the particulars of every transfer of shares.

25. The Register may be closed at such times and for such periods as the Directors may from time to time reasonably determine for bona fide business or legal reasons, not exceeding in the whole thirty days in any year.

TRANSMISSION OF SHARES

26. In case of the death of a Member, the survivor or survivors, where the deceased was a joint holder, and the executors or administrators of the deceased, where he was a sole or only surviving holder, shall be the only persons recognised by the Company as having any title to his interest in the shares, but nothing herein shall release the estate of a deceased Member (whether sole or joint) from any liability in respect of any share held by him.

27. Any person becoming entitled to a share in consequence of the death or bankruptcy of any Member may, upon producing such evidence of title as the Directors shall require, be registered himself as holder of the share upon giving to the Company notice in writing of such his desire or transfer such share to some other person. If the person so becoming entitled shall elect to be registered himself, he shall deliver or send to the Company a notice in writing signed by him stating that he so elects. If he shall elect to have another person registered he shall testify his election by executing to that person a transfer of the share. All the limitations, restrictions and provisions of these Articles relating to the right to transfer and the registration of transfers shall be applicable to any such notice or transfer as aforesaid as if the death or bankruptcy of the Member had not occurred and the notice or transfer were a transfer executed by such Member.

28. Save as otherwise provided by or in accordance with these Articles a person becoming entitled to a share in consequence of the death or bankruptcy of a Member shall be entitled to the same dividends and other advantages to which he would be entitled if he were the registered holder of the share except that he shall not be entitled in respect thereof to exercise any right conferred by membership in relation to meetings of the Company until he shall have been registered as a Member in respect of the share.

29. There shall be paid to the Company in respect of the registration of any probate, letters of administration, certificate of marriage or death, power of attorney or other document relating to or affecting the title to any shares, such fee not exceeding S$2/- as the Directors may from time to time require or prescribe.

CALLS ON SHARES

30. The Directors may from time to time make such calls as they think fit upon the Members in respect of any moneys unpaid on their shares and not by the terms of the issue thereof made payable at fixed times, and each Member shall (subject to receiving at least fourteen days' notice specifying the time or time and place of payment) pay to the Company at the time or times and place so specified the amount called on his shares. A call may be revoked or postponed as the Directors may determine.

31. A call shall be deemed to have been made at the time when the resolution of the Directors authorising the call was passed and may be made payable by instalments.

32. If a sum called in respect of a share is not paid before or on the day appointed for payment thereof, the person from whom the sum is due shall pay interest on the sum due from the day appointed for payment thereof to the time to actual payment at such rate not exceeding ten per cent. (10%) per annum as the Directors determine, but the Directors shall be at liberty to waive payment of such interest wholly or in part.

33. Any sum which by the terms of issue of a share becomes payable upon allotment or at any fixed date, shall for all purposes of these Articles be deemed to be a call duly made and payable on the date, on which, by the terms of issue, the same becomes payable, and in case of non-payment all the relevant provisions of the Articles as to payment of interest and expenses, forfeiture or otherwise shall apply as if such sum had become payable by virtue of a call duly made and notified.

34. The Directors may on the issue of shares differentiate between the holders as to the amount of calls to be paid and the times of payments.

35. The Directors may, if they think fit, receive from any Member willing to advance the same all or any part of the moneys uncalled and unpaid upon the shares held by him and such payments in advance of calls shall extinguish, so far as the same shall extend, the liability upon the shares in

respect of which it is made, and upon the moneys so received or so much thereof as from time to time exceeds the amount of the calls then made upon the shares concerned the Company may pay interest at such rate not exceeding ten per cent. (10%) per annum as the Member paying such sum and the Directors agree upon.

FORFEITURE AND LIEN

36. If any Member fails to pay in full any call or instalment of a call on the day appointed for payment thereof, the Directors may at any time thereafter serve a notice on such Member requiring payment of so much of the call or instalment as is unpaid together with any interest and expenses which may have accrued.

37. The notice shall name a further day (not being less than fourteen days from the date of service of the notice) on or before which and the place where the payment required by the notice is to be made, and shall state that in the event of non-payment in accordance therewith the shares on which the call was made will be liable to be forfeited.

38. If the requirements of any such notice as aforesaid are not complied with, any share in respect of which such notice has been given may at any time thereafter, before payment of all calls and interest and expenses due in respect thereof be forfeited by a resolution of the Directors to that effect. Such forfeiture shall include all dividends declared in respect of the forfeited share and not actually paid before the forfeiture. The Directors may accept a surrender of any share liable to be forfeited hereunder.

39. A share so forfeited or surrendered shall become the property of the Company and may be sold, re-allotted or otherwise disposed of either to the person who was before such forfeiture or surrender the holder thereof or entitled thereto, or to any other person, upon such terms and in such manner as the Directors shall think fit, and at any time before a sale, re-allotment or disposition the forfeiture or surrender may be cancelled on such terms as the Directors think fit. To give effect to any such sale, the Directors may, if necessary, authorise some person to transfer a forfeited or surrendered share to any person as aforesaid.

40. A Member whose shares have been forfeited or surrendered shall cease to be a Member in respect of the shares, but shall notwithstanding the forfeiture or surrender remain liable to pay to the Company all moneys which at the date of forfeiture or surrender were payable by him to the Company in respect of the shares with interest thereon at ten per cent (10%) per annum (or such lower rate as the Directors may approve) from the date of forfeiture or surrender until payment, but such liability shall cease if and when the Company receives payment in full of all such money in respect of the shares and the Directors may waive payment of such interest either wholly or in part.

41. The Company shall have a first and paramount lien and charge on every share (not being a fully paid share) registered in the name of each Member (whether solely or jointly with others) and on the dividends declared or payable in respect thereof for all calls and instalments due on any such share and interest and expenses thereon but such lien shall only be upon the specific shares in respect of which such calls or instalments are due and unpaid and on all dividends from time to time declared in respect of the shares. The Directors may resolve that any share shall for some specified period be exempt from the provision of this Article.

42. (a) The Company may execute, complete and deliver in the name of any Member and on such Member’s behalf the sale of all of his Shares.

42. (b) The Company may sell in such manner as the Directors think fit any share on which the Company has a lien, but no sale shall be made unless some sum in respect of which the lien exists is presently payable nor until the expiration of fourteen days after notice in writing stating and demanding payment of the sum payable and giving notice of intention to sell in default, shall have been given to the registered holder for the time being of the share or the person entitled thereto by reason of his death or bankruptcy. To give effect to any such sale, the Directors may authorise some person to transfer the shares sold to the purchaser thereof.

43. The proceeds of the sale shall be received by the Company and applied in payment of such part of the amount in respect of which the lien exists as is presently payable and the residue, if any, shall (subject to a like lien for sums not presently payable as existed upon the shares before the sale) be paid to the person entitled to the shares at the date of the sale.

44. A statutory declaration in writing that the declarant is a Director of the Company and that a share has been duly forfeited or surrendered or sold to satisfy a lien of the Company on a date stated in the declaration shall be conclusive evidence of the facts stated therein as against all persons claiming to be entitled to the share, and such declaration and the receipt of the Company for the consideration (if any) given for the share on the sale, re-allotment or disposal thereof together with the certificate of proprietorship of the share under Seal delivered to a purchaser or allottee thereof shall (subject to the executive of a transfer if the same be required) constitute a good title to the share and the person to whom the share is sold, re-allotted or disposed of shall be registered as the holder of the share and shall not be bound to see to the application of the purchase money (if any) nor shall his title to the share be affected by any irregularity or invalidity in the proceedings in reference to the forfeiture, surrender, sale, re-allotment or disposal of the share.

ALTERATION OF CAPITAL

45. Subject to the provisions of these Articles, the Company in general meeting may from time to time by Ordinary Resolution increase its capital by the allotment and issue of new shares.

46. Subject to any special rights for the time being attached to any existing class of shares, the new shares shall be issued upon such terms and conditions and with such rights and privileges annexed thereto as the general meeting resolving upon the creation thereof shall direct and if no direction be given as the Directors shall determine subject to the provisions of these Articles and in particular (but without prejudice to the generality of the foregoing) such shares may be issued with a preferential or qualified right to dividends and in the distribution of assets of the Company or otherwise.

47. Unless otherwise determined by the Company in general meeting, any new Ordinary Shares or securities convertible into Ordinary Shares from time to time to be created shall before issue be offered in the first instance to all the then holders of any class of shares (other than the Series A Preferred Shareholder) in proportion as nearly as may be to the amount of capital held by them. In offering such shares in the first instance to all the then holders of any class of shares (other than the Series A Preferred Shareholder) the offer shall be made by notice specifying the number of shares offered and limiting the time within which the offer if not accepted will be deemed to be declined and after the expiration of that time or on the receipt of an intimation from the person to whom the offer is made that he declines to accept the shares offered, the Directors may dispose of those shares in such manner as they think most beneficial to the Company and the Directors may dispose of or not issue any such shares which by reason of the proportion borne by them to the number of holders entitled to any such offer or by reason of any other difficulty in apportioning the same cannot, in the opinion of the Directors, be conveniently offered under this Article.

48. Except so far as otherwise provided by the conditions of issue or by these Articles all new shares shall be subject to the provisions of these Articles with reference to allotments, payment of calls, lien, transfer, transmission, forfeiture and otherwise.

49. Subject to the provisions of these Articles, the Company may by Ordinary Resolution:

(a) consolidate and divide all or any of its share capital;

(b) cancel any shares which, at the date of the passing of the resolution, have been forfeited and diminish the amount of its share capital by the number of shares so cancelled;

(c) subdivide its shares or any of them (subject nevertheless to the provisions of the Act) provided always that in such subdivision the proportion between the amount paid and the amount (if any) unpaid on each reduced share shall be the same as it was in the case of the share from which the reduced share is derived; and

(d) subject to the provisions of these Articles and the Act, convert any class of shares into any other class of shares.

50. (a) Subject to the provisions of these Articles, the Company may by Special Resolution reduce its share capital in any manner and with and subject to any incident authorised and consent required by law.

(b) Subject to and in accordance with the provisions of the Act and these Articles, the Company may authorise the Directors in general meeting to purchase or otherwise acquire ordinary shares issued by it on such terms as the Company may think fit and in the manner prescribed by the Act. All shares purchased by the Company other than those shares that are to be held in treasury in accordance with the provisions of these Articles and the Act shall be cancelled.

51. Shares that the Company purchases or otherwise acquires may be held as treasury shares in accordance with the provisions of these Articles and the Act.

52. Where the shares purchased or otherwise acquired are held as treasury shares by the Company, the Company shall be entered in the Register as the Member holding the shares.

53. The Company shall not exercise any right in respect of the treasury shares other than as provided by the Act. Subject thereto, the Company may hold or deal with its treasury shares in the manner authorised by, or prescribed pursuant to, the Act.

STOCK

54. The Company may by Ordinary Resolution convert any paid up shares into stock and may from time to time by like resolution reconvert any stock into paid up shares.

55. The holders of stock may transfer the same or any part thereof in the same manner and subject to the same Articles as and subject to which the shares from which the stock arose might previously to conversion have been transferred or as near thereto as circumstances admit but no stock shall be transferable except in such units as the Directors may from time to time determine.

56. The holders of stock shall, according to the number of stock units held by them, have the same rights, privileges and advantages as regards dividend, return of capital voting and other matters, as if they held the shares from which the stock arose; but no such privilege or advantage (except as regards dividend and return of capital and the assets on winding up) shall be conferred by any such aliquot part of stock which would not if existing in shares have conferred that privilege or advantage; and no such conversion shall affect or prejudice any preference or other special privileges attached to the shares so converted.

57. All such of the provisions of these Articles as are applicable to paid up shares interpretation, shall apply to stock and the words “share” and “shareholder” or similar expressions herein shall include “stock” or “stockholder”.

GENERAL MEETINGS

58. (a) Subject to the provisions of the Act and Article 59 hereof, the Company shall in each year hold a general meeting as its annual general meeting in addition to any other meetings in that year and not more than fifteen months shall elapse between the date of one (1) annual general meeting of the Company and that of the next.

(b) All general meetings other than annual general meetings shall be called extraordinary general meetings.

(c) The time and place of any general meeting shall be determined by the Directors, provided that the Members entitled to attend such general meeting (in person or by proxy or attorney or in the case of a corporation, by a representative) shall meet at least once each year in accordance with these Articles and at such other times as may be determined by the Members together holding not less than ten percent (10%) of the Ordinary Shares then in issue, and any general meeting shall be held at such convenient location as the Board of Directors may resolve.

59. (a) The Company shall dispense with the holding of annual general meetings in accordance with the provisions of the Act if a resolution to this effect is passed at a general meeting by all Members as, being entitled to do so, vote in person or by proxy present at the general meeting.

(b) Notwithstanding a resolution referred to in Article 59(a) being passed to dispense with the holding of annual general meetings, any Member may by notice given to the Company in accordance with the requirements of the Act require an annual general meeting to be held for the year. The Company shall proceed to convene the annual general meeting in accordance with these Articles but shall not be required to convene annual general meetings for the subsequent years unless a notice by a Member to require the Company to do so has been received.

(c) Where a resolution referred to in Article 59(a) has been passed to dispense with the holding of annual general meetings, any reference in the Act to a deed, act or thing which is required to be done in annual general meetings shall be regarded as being done if a resolution or resolutions of the Members has or have been passed by written means in accordance with these Articles to the effect that such deed, act or thing has been done, and any reference in the Act to the date or conclusion of an annual general meeting shall, unless an annual general meeting is held, be regarded as the date of expiry of the period within which the annual general meeting is required by law to be held.

60. The Directors may, whenever they think fit, convene an extraordinary general meeting and extraordinary general meetings shall also be convened on such requisition or, in default, may be convened by such requisitionists, as provided by Section 176 of the Act. If at any time there are not within Singapore sufficient Directors capable of acting to form a quorum at a meeting of Directors, any Director may convene an extraordinary general meeting in the same manner as nearly as possible as that in which meetings may be convened by the Directors.

NOTICE OF GENERAL MEETINGS

61. Subject to the provisions of the Act as to special notice, at least fourteen days' notice in writing (exclusive both of the day on which the notice is served or deemed to be served and of the day for which the notice is given) of every general meeting shall be given in the manner hereinafter mentioned to such persons (including the auditors) as are under the provisions herein contained entitled to receive notice from the Company. Provided that a general meeting notwithstanding that it has been called by a shorter notice than that specified above shall be deemed to have been duly called if it is so agreed:

(a) in the case of an annual general meeting by all the Members entitled to attend and vote thereat; and

(b) in the case of an extraordinary general meeting by that number or majority in number of the Members having a right to attend and vote thereat as is required by the Act.

62. (a) Every notice calling a general meeting shall specify the place and the day and hour of the meeting and the business to be transacted thereat, and there shall appear with reasonable prominence in every such notice a statement that a Member entitled to attend and vote is entitled to appoint a proxy to attend and to vote instead of him and that a proxy need not be a Member of the Company.

(b) In the case of an annual general meeting, the notice shall also specify the Meeting as such.

(c) In the case of any general meeting at which business other than routine business is to be transacted, the notice shall specify the general nature of the business; and if any resolution is to be proposed as a Special Resolution or as requiring special notice, the notice shall contain a statement to that effect. Routine business shall mean and include only business transacted at an annual general meeting of the following classes, that is to say:

(i) Declaring dividends;

(ii) Reading, considering and adopting the balance sheet, the reports of the Directors and auditors, and other accounts and documents required to be annexed to the balance sheet;

(iii) Appointing auditors and fixing the remuneration of auditors or determining the manner in which such remuneration is to be fixed; and

(iv) Fixing the remuneration of the Directors proposed to be paid under Article 96.

63. In the event time is needed for a Member to apply and obtain necessary travelling visa in order to attend a general meeting, a notice of not more than sixty (60) days shall be given, taking into account the reasonable time needed for such Member to obtain necessary travel document(s) in order to attend the meeting.

PROCEEDINGS AT GENERAL MEETINGS

64. Where there are two (2) or more Members of the Company, no business shall be transacted at any general meeting or any adjourned meeting unless the Members together holding not less than seventy-five percent (75%) of the Ordinary Shares in then in issue are present to form a quorum. In the event of a corporation being beneficially entitled to the whole of the issued capital of the Company or there being only one (1) Member of the Company, one (1) person representing such corporation or the sole Member shall be a quorum and shall be deemed to constitute a Meeting and, if applicable, the provisions of Section 179 of the Act shall apply. For the purpose of this Article, “Member” includes a person attending by proxy or by attorney or as representing a corporation which is a Member.

65. If no quorum is present by the appointed time of any general meeting, the meeting shall stand adjourned to such time and place as the majority of the Directors may determine, and if at such adjourned Meeting a quorum is not present within fifteen minutes from the time appointed for holding the Meeting, the Meeting shall be dissolved. No notice of any such adjournment as aforesaid shall be required to be given to the Members.

66. The chairman of the Company shall be a Director appointed by a majority of the Directors and the chairman of the Board of Directors shall preside as chairman at every general meeting. If there be no such chairman or if at any Meeting he be not present within fifteen minutes after the time appointed for holding the Meeting or be unwilling to Act, the Members present shall choose some Director to be chairman of the Meeting or, if no Director be present or if all the Directors present decline to take the Chair, one (1) of their number present, to be chairman. If the chairman is removed, any replacement chairman shall be appointed subject to the Directors’ majority approval. In the event that the Directors are unable to agree as such, the Members shall convene one (1) or more Members’ meeting, to be held within a period of ninety (90) days after the chairman is so removed, for the purpose of approving an alternative arrangement acceptable to all Members.

67. The chairman may, with the consent of any Meeting at which a quorum is present (and shall if so directed by the Meeting) adjourn the Meeting from time to time and from place to place, but no business shall be transacted at any adjourned Meeting except business which might lawfully have been transacted at the Meeting from which the adjournment took place. When a Meeting is adjourned for thirty days or more, notice of the adjourned Meeting shall be given as in the case of the original Meeting. Save as aforesaid, it shall not be necessary to give any notice of an adjournment or of the business to be transacted at an adjourned Meeting.

68. (a) At any general meeting a resolution put to the vote of the Meeting shall be decided on a show of hands unless a poll be (before or on the declaration of the result of the show of hands) demanded by at least one (1) Member present in person or by proxy or by attorney or in the case of corporation by a representative and entitled to vote thereat Provided always that no poll shall be demanded on the election of a chairman or on a question of adjournment. Unless a poll be so demanded (and the demand be not withdrawn) a declaration by the chairman that a resolution has been carried or carried unanimously or by a particular majority or lost and an entry to that effect in the minute book shall be conclusive evidence of the fact without proof of the number or proportion of the votes recorded in favour of or against the resolution. A demand for a poll may be withdrawn. Except as otherwise provided in these Articles and any applicable laws, all resolutions of the Members shall be adopted by a simple majority of votes cast by such Members at a general meeting.

68A. (b) Any general meeting may consist of a conference between the Members participating in the meeting some or all of whom are in different places, provided that each such Member who participates is able:

(i) to hear the other participating Members addressing the meeting; and

(ii) if it so wishes, to address all of the other participating Members simultaneously,

whether directly, by conference telephone or by any other form of communications equipment or by a combination of those methods. A quorum is deemed to be present if the conditions of this Article 68A are satisfied in respect of at least the number of Ordinary Shareholders required to form a quorum. If any Ordinary Shareholder so requests, such alternative mode of communication (whether by video conference, conference telephone or other similar communications) shall be arranged so as to facilitate the attendance of an Ordinary Shareholder at such general meeting remotely.

69. If a poll be duly demanded (and the demand be not withdrawn) it shall be taken in such manner (including the use of ballot or voting papers or tickets) as the chairman may direct and the result of a poll shall be deemed to be the resolution of the Meeting at which the poll was demanded. The chairman may, and if so requested shall, appoint scrutineers and may adjourn the Meeting to some place and time fixed by him for the purpose of declaring the result of the poll.

70. If any votes have been counted which ought not to have been counted or might have been rejected, the error shall not vitiate the result of the voting unless it be pointed out at the same Meeting or at any adjournment thereof and not in any case unless it shall in the opinion of the chairman be of sufficient magnitude.

71. In the case of equality of votes, whether on a show of hands or on a poll, the chairman of the Meeting at which the show of hands takes place or at which the poll is demanded shall not be entitled to a casting vote.

72. A poll demanded on any question shall be taken either immediately or at such subsequent time (not being more than thirty days from the date of the Meeting) and place as the chairman may direct. No notice need be given of a poll not taken immediately.

73. The demand for a poll shall not prevent the continuance of a Meeting for the transaction of any business, other than the question on which the poll has been demanded.

VOTES OF MEMBERS

74. Subject to these Articles and to any special rights or restrictions as to voting attached to any class of shares hereinafter issued on a show of hands every Member who is present in person or by proxy or attorney or in the case of a corporation by a representative shall have one (1) vote and on a poll every such Member shall have one (1) vote for every share of which he is the holder.

75. Where there are joint registered holders of any share any one (1) of such persons may vote and be reckoned in a quorum at any Meeting either personally or by proxy or by attorney or in the

case of a corporation by a representative as if he were solely entitled thereto and if more than one (1) of such joint holders be so present at any Meeting that one (1) of such persons so present whose name stands first in the Register in respect of such share shall alone be entitled to vote in respect thereof. Several executors or administrators of a deceased Member in whose name any share stands shall for the purpose of this Article be deemed joint holders thereof.

76. A Member of unsound mind or whose person or estate is liable to be dealt with in any way under the law relating to mental disorders may vote whether on a show of hands or on a poll by his committee, curator bonis or such other person as properly has the management of his estate and any such committee, curator bonis or other person may vote by proxy or attorney, provided that such evidence as the Directors may require of the authority of the person claiming to vote shall have been deposited at the Office not less than forty eight hours before the time appointed for holding the Meeting.

77. Subject to the provisions of these Articles every Member shall be entitled to be present and to vote at any general meeting either personally or by proxy or by attorney or in the case of a corporation by a representative and to be reckoned in a quorum in respect of shares fully paid and in respect of partly paid shares where calls are not due and unpaid.

78. No objection shall be raised to the qualification of any voter except at the Meeting or adjourned Meeting at which the vote objected to is given or tendered and every vote not disallowed at such Meeting shall be valid for all purposes. Any such objection made in due time shall be referred to the chairman of the Meeting whose decision shall be final and conclusive.

79. On a poll votes may be given either personally or by proxy or by attorney or in the case of a corporation by its representative and a person entitled to more than one (1) vote need not use all his votes or cast all the votes he uses in the same way.

80. An instrument appointing a proxy shall be in writing and:

(a) in the case of an individual shall be signed by the appointor or by his attorney; and

(b) in the case of a corporation shall be either under the common seal or signed by its attorney or by an officer on behalf of the corporation.

The Directors may, but shall not be bound to, require evidence of the authority of any such attorney or officer.

81. A proxy need not be a Member of the Company.

82. An instrument appointing a proxy or the power of attorney or other authority, if any, must be left at the Office or such other place (if any) as is specified for the purpose in the notice convening the Meeting not less than forty eight hours before the time appointed for the holding of the Meeting or adjourned Meeting (or in the case of a poll before the time appointed for the taking of the poll) at which it is to be used and in default shall not be treated as valid unless the Directors otherwise determine.

83. An instrument appointing a proxy shall be in the following form with such variations if any as circumstances may require or in such other form as the Directors may accept and shall be deemed to include the right to demand or join in demanding a poll:

“WAVE LIFE SCIENCES PTE. LTD.”

“I/We,
of
a Member/Members of the above named Company hereby appoint
of
or whom failing

of
to vote for me/us and on my/our behalf
at the (Annual, Extraordinary or Adjourned,
as the case may be) general meeting of
the Company to be held on the day
of and at every adjournment
thereof."

"As witness my hand this day of ."

An instrument appointing a proxy shall, unless the contrary is stated thereon, be valid as well for any adjournment of the Meeting as for the Meeting to which it relates and need not be witnessed.

84. A vote given in accordance with the terms of an instrument of proxy (which for the purposes of these Articles shall also include a power of attorney) shall be valid notwithstanding the previous death or insanity of the principal or revocation of the proxy, or of the authority under which the proxy was executed or the transfer of the share in respect of which the proxy is given, provided that no intimation in writing of such death, insanity, revocation or transfer shall have been received by the Company at the Office (or such other place as may be specified for the deposit of instruments appointing proxies) before the commencement of the Meeting or adjourned Meeting (or in the case of a poll before the time appointed for the taking of the poll) at which the proxy is used.

85. Any corporation which is a Member of the Company may by resolution of its directors or other governing body authorise such person as it thinks fit to act as its representative at any Meeting of the Company or of any class of Members of the Company and the person so authorised shall be entitled to exercise the same powers on behalf of the corporation as the corporation could exercise if it were an individual Member of the Company.

MEMBERS' RESOLUTIONS BY WRITTEN MEANS

86. Save for a resolution referred to in Article 59 to dispense with the convening of annual general meetings or a resolution for which special notice is required under the Act, any resolution required to be passed by the Members of the Company in general meeting may be passed by written means in accordance with the provisions of Sections 184A to 184F of the Act and these Articles. Where a resolution is deemed to be duly passed by written means, the requirements as to the procedures in these Articles concerning the giving of notice of general meetings, proceedings of such general meetings and voting by Members at such general meetings shall be deemed to be satisfied.

87. A Special Resolution is passed by written means if the resolution indicates that it is a Special Resolution and it has been formally agreed on any date by one (1) or more Members who on that date represent at least seventy-five percent (75%) of the total voting rights of all Members who on that date would have the right to vote on that resolution had a general meeting been convened. An Ordinary Resolution is passed by written means if the resolution does not indicate that it is a Special Resolution and it has been formally agreed on any date by one (1) or more Members who collectively on that date hold more than fifty percent (50%) of the issued Ordinary Shares held by all of the Members. For the avoidance of doubt, the requisite number of Members need not give their formal agreement to any Special Resolution or Ordinary Resolution on a single day.

88. For the purpose of Article 87, a resolution is formally agreed by a Member if:

(a) the Company receives from the Member (or his proxy) a document that (i) is given to the Company in legible form or a permitted alternative form; (ii) indicates the Member's agreement (or agreement on his behalf) to the resolution; and (iii) includes the text of the resolution or otherwise makes clear that it is that resolution that is being agreed to; and

(b) the Member (or his proxy) had a legible text of the resolution before giving that document.

In this Article 88 and also for the purpose of Article 90, something is "in legible form or a permitted alternative form" if, and only if, it is sent or otherwise supplied (a) in a form (such as paper document) that is legible before being sent or otherwise supplied and does not change form during that process or (b) through electronic communication.

89. A resolution of the Company may only be passed by written means if agreement was first sought by the Directors in accordance with Article 90, under the circumstances described in Section 184B(1)(a)(ii) of the Act.

90. In seeking the agreement of the Members to pass any resolution by written means, the Directors shall send to each Member who would have the right to vote on that resolution had a general meeting been convened, a copy of the text of the resolution in legible form or a permitted alterative form. As far as practicable, the Directors shall send the text of the resolution as respects every Member at the same time and without delay, and the provisions of Section 184C of the Act shall apply.

91. Any Member or Members who represent at least five per cent, (5%) of the total voting rights of all Members who would have the right to vote on that resolution had a general meeting been convened, may within seven (7) days after receiving the text of the resolution sent pursuant to Article 90 or the documents referred to in Section 183(3A) of the Act, as the case may be, give notice to the Company requiring that a general meeting be convened for the purpose of considering, and if thought fit, passing the resolution. Upon receipt of such a notice, the Directors shall proceed to convene a general meeting in accordance with Articles 61 to 73 hereof.

92. Where a resolution of the Members is passed by written means, the Company shall notify every Member that the resolution has been passed within fifteen days from the date on which a Director or Company Secretary first becomes aware that the resolution has been passed. The Company shall cause a record of the resolution passed by written means and the indication of each Member's agreement (or agreement on his behalf) to be entered in a book in the like manner for recording proceedings of general meetings in the minute book. Any such record, if purporting to be signed by a Director or the Company Secretary shall be evidence of the proceedings in passing the resolution, and until the contrary is proved, the record shall also be evidence that the requirements of the Act with respect to the proceedings in passing the resolution have been complied with.

93. Notwithstanding anything in these Articles, where there is only one (1) Member of the Company, a resolution passed by written means may be passed by the Member recording the resolution and signing the record.

DIRECTORS

94. Subject to the other provisions of Section 145 of the Act, the Company shall have at least one (1) Director being a natural person of full age and capacity who is ordinarily resident in Singapore and unless otherwise determined by a general meeting, there shall be no maximum number of Directors holding office at any time.

95. A Director need not be a Member and shall not be required to hold any share qualification unless and until otherwise determined by the Company in general meeting but shall be entitled to attend and speak at general meetings. Where the Company only has one (1) Member, the sole Member may also be the sole Director of the Company provided that the requirements in Article 94 are complied with.

96. Save as otherwise determined by an affirmative vote comprising more than seventy-five percent (75%) of the issued and outstanding Ordinary Shares, none of the Directors shall receive any remuneration from the Company for their services as Director of the Company.

97. The Directors shall be entitled to be repaid all travelling or such reasonable expenses as may be incurred in attending and returning from meetings of the Directors or of any committee of the Directors or general meetings or otherwise howsoever in or about the business of the Company in the course of the performance of their duties as Directors.

98. Any Director who is appointed to any executive office or serves on any committee or who otherwise performs or renders services, which in the opinion of the Directors are outside his ordinary duties as a Director, may, subject to Section 169 of the Act, be paid such extra remuneration as the Directors may determine.

99. (a) Other than the office of auditor, a Director may hold any other office or place of profit under the Company and he or any firm of which he is a member may act in a professional capacity for the Company in conjunction with his office of Director for such period and on such terms (as to remuneration and otherwise) as the Directors may determine. Subject to the Act, no Director or intending Director shall be disqualified by his office from contracting or entering into any arrangement with the Company either as vendor, purchaser or otherwise nor shall such contract or arrangement or any contract or arrangement entered into by or on behalf of the Company in which any Director shall be in any way interested be avoided nor shall any Director so contracting or being so interested be liable to account to the Company for any profit realised by any such contract or arrangement by reason only of such Director holding that office or of the fiduciary relation thereby established.

(b) Every Director shall observe the provisions of Section 156 of the Act relating to the disclosure of the interests of the Directors in transactions or proposed transactions with the Company or of any office or property held by a Director which might create duties or interests in conflict with his duties or interests as a Director. Subject to such disclosure, a Director shall be entitled to vote in respect of any transaction or arrangement in which he is interested and he shall be taken into account in ascertaining whether a quorum is present.

(c) Notwithstanding anything herein to the contrary, the Company renounces, to the fullest extent permitted by law, any interest or expectancy of the Company in, or in being offered an opportunity to participate in, any Excluded Opportunity. An ***Excluded Opportunity*** is any matter, transaction or interest that (a) is presented to, or acquired, created or developed by, or which otherwise comes into the possession of (i) any Director of the Company, in his individual capacity and not in his capacity as a fiduciary of the Company, who is not an employee of the Company or any of its subsidiaries, or (ii) any holder of Shares or any partner, member, director, stockholder, employee or agent of any such holder, other than someone who is an employee of the Company or any of its subsidiaries (collectively, ***Covered Persons***) and (b) the Covered Person has not wrongfully employed the resources of the Company in pursuing or exploiting the opportunity, unless such matter, transaction or interest is presented to, or acquired, created or developed by, or otherwise comes into the possession of, a Covered Person expressly and solely in such Covered Person’s capacity as a fiduciary of the Company.

100. (a) A Director may be or become a director of or hold any office or place of profit (other than as auditor) or be otherwise interested in any company in which the Company may be interested as vendor, purchaser, shareholder or otherwise and unless otherwise agreed shall not be accountable for any fees, remuneration or other benefits received by him as director or officer of or by virtue of his interest in such other Company.

(b) The Directors may exercise the voting power conferred by the shares in any company held or owned by the Company in such manner and in all respects as the Directors think fit in the interests of the Company (including the exercise thereof in favour of any resolution appointing the Directors or any of them to be directors of such company or voting or providing for the payment of remuneration to the directors of such company) and any such Director of the Company may vote in favour of the exercise of such voting powers in the manner aforesaid notwithstanding that he may be or be about to be appointed a director of such other company.

APPOINTMENT AND REMOVAL OF DIRECTORS

101. Subject to the provisions of these Articles, the Directors shall have power at any time and from time to time to appoint any person to be a Director either to fill a casual vacancy or as an additional Director but so that the total number of Directors shall not at any time exceed the maximum number, if any, fixed by or in accordance with these Articles.

102. Subject to the provisions of these Articles, the Company may by Ordinary Resolution remove any Director before the expiration of his period of office.

103. Subject to the provisions of these Articles, the Company may by Ordinary Resolution appoint another person in place of a Director removed from office under the immediately preceding Article.

MANAGING DIRECTORS

104. The Directors may from time to time appoint one (1) or more of their body to be managing director or managing directors of the Company and may from time to time (subject to the provisions of any contract between him or them and the Company) remove or dismiss him or them from office and appoint another or others in his or their places.

105. A managing director shall subject to the provisions of any contract between him and the Company be subject to the same provisions as to resignation and removal as the other Directors of the Company and if he ceases to hold the office of Director from any cause he shall ipso facto and immediately cease to be a managing director.

106. Subject to Section 169 of the Act, the remuneration of a managing director shall from time to time be fixed by the Directors and may subject to these Articles be by way of salary or commission or participation in profits or by any or all of these modes.

107. The Directors may from time to time entrust to and confer upon a managing director for the time being such of the powers exercisable under these Articles by the Directors as they may think fit and may confer such powers for such time and to be exercised on such terms and conditions and with such restrictions as they think expedient and they may confer such powers either collaterally with or to be exclusion of and in substitution for all or any of the powers of the Directors in that behalf and may from time to time revoke, withdraw, alter or vary all or any of such powers.

VACATION OF OFFICE OF DIRECTOR

108. The office of a Director shall be vacated in any one (1) of the following events, namely:

(a) if he becomes prohibited from being a Director by reason of any order made under the Act;

(b) if he ceases to be a Director by virtue of any of the provisions of the Act or these Articles;

(c) subject to Section 145 of the Act, if he resigns by writing under his hand left at the Office; or

(d) if he be found lunatic or become of unsound mind.

ALTERNATE DIRECTORS

109. (a) Any Director may at any time by writing under his hand and deposited at the Office or by e-mail transmission, telefax, telex or by cable sent to the Secretary and by giving prior written notice to the Board of Directors appoint any person to be his Alternate Director and may in like manner at any time terminate such appointment. Any appointment or removal by telefax, telex or cable shall be confirmed as soon as possible by letter, but may be acted upon by the Company meanwhile.

(b) A Director or any other person may act as an Alternate Director to represent more than one (1) Director and such Alternate Director shall be entitled at Directors' meetings to one (1) vote for every Director whom he represents in addition to any vote of his.

(c) The appointment of an Alternate Director shall ipso facto determine on the happening of any event which if he were a Director would render his office as a Director to be vacated and his appointment shall also determine ipso facto if his appointor ceases for any reason to be a Director.

(d) An Alternate Director shall be entitled to receive notices of meetings of the Directors and to attend and vote as a Director at any such meeting at which the Director appointing him is not personally present and generally, if his appointor is absent from Singapore or is otherwise unable to act as such Director, to perform all functions of his appointment as a Director (except the power to appoint an Alternate Director) and to sign any resolution in accordance with the provisions of Article 115.

(e) An Alternate Director shall not be taken into account in reckoning the minimum or maximum number of Directors allowed for the time being under these Articles but he shall be counted for the purpose of reckoning whether a quorum is present at any meeting of the Directors attended by him at which he is entitled to vote provided that he shall not constitute a quorum under Article 112 if he is the only person present at the meeting notwithstanding that he may be an Alternate Director to more than one (1) Director.

(f) An Alternate Director may be repaid by the Company such expenses as might properly be repaid to him if he were a Director and he shall be entitled to receive from the Company such proportion (if any) of the remuneration otherwise payable to his appointor as such appointor may by notice in writing to the Company from time to time direct, but save as aforesaid he shall not in respect of such appointment be entitled to receive any remuneration from the Company.

(g) An Alternate Director shall not be required to hold any share qualification.

(h) An Alternate Director shall automatically vacate his office as alternate director if the Director who appointed him ceases to be a Director of the Company.

PROCEEDINGS OF DIRECTORS

110. (a) The Directors may meet together for the despatch of business, adjourn or otherwise regulate their meetings as they think fit but in any case not less than once a year and provided that such meetings are convened and conducted in accordance with the provisions of these Articles. Subject to the provisions of these Articles, questions arising at any meeting shall be determined by a majority of votes and in case of an equality of votes the chairman of the meeting shall not have a second or casting vote.

(b) Any Director or his alternate may participate at a meeting of the Directors by telephone conference, video conference, audio visual or by means of a similar communication equipment whereby all persons participating in the meeting are able to hear each other in which event such Director shall be deemed to be present at the meeting. A Director or his alternate participating in a meeting in the manner aforesaid may also be taken into account in ascertaining the presence of a quorum at the meeting, and such meeting shall be deemed to take place where the largest group of Directors for the purpose of the (assembled) meeting or, if there is no such group, where the chairman is present. Minutes of the proceedings at a meeting by telephone conference, video conference, audio visual, or other similar communications equipment signed by the chairman of the meeting shall be conclusive evidence of such proceedings and of the observance of all necessary formalities.

111. A Director may and the Secretary on the requisition of a Director shall at any time summon a meeting of the Directors. At least fourteen (14) days' notice (exclusive of the day on which the notice is served or is deemed to be served and the day for which the meeting is called) of every meeting of

the Directors shall be given to every Director. Every such notice shall specify the place, the day and the hour of the meeting, the general nature of the business to be transacted and shall be accompanied by an agenda of the business to be transacted at such meeting together with all papers to be circulated or presented to the Directors at such meeting, provided that any Director may waive the requirement for notice or accept shorter notice of any meeting of the Directors. A copy of the minutes of each meeting of the Directors shall be delivered to each Director within no more than thirty (30) days of each such meeting.

112. Except where the Company only has one (1) Director, the quorum necessary for the transaction of the business of the Directors, including at any adjourned meeting of the Directors, shall be Directors present in person or represented by an alternate Director, numbering at least 75% of the total number of Directors. Where no quorum is present at any duly convened meeting, the meeting shall be adjourned to such time and place as the majority of the Directors may determine. A meeting of the Directors at which a quorum is present shall be competent to exercise all the powers and discretions for the time being exercisable by the Directors.

113. The continuing Directors may act notwithstanding any vacancies in their body but if and so long as the number of Directors is reduced below the minimum number fixed by or in accordance with these Articles the continuing Directors or Director may act for the purpose of filling up such vacancies or of summoning general meetings of the Company but not for any other purpose. If there be no Directors or Director able or willing to act, then any Members, or if the Company only has a sole Member, then that sole Member, may summon a general meeting for the purpose of appointing one (1) or more Directors.

114. The Director shall elect a chairman and may elect one (1) or more vice-chairmen and the Directors may determine the period for which such officers shall respectively hold office. The chairman (if any), or, in the absence of the chairman, the vice-chairman (if any), or, in the event that there is more than one (1) vice-chairman, the senior in appointment among them, shall preside at the meetings of the Directors. If such officers have not been appointed, or if no such officer is present within five (5) minutes after the time appointed for a meeting, the Directors present shall choose one (1) of their number to be chairman at such meeting.

115. (a) A resolution in writing signed by the majority of Directors being not less than (2) except where the Company only has one (1) Director, and any circular resolution of the Directors, shall be as effective as a resolution passed at a meeting of the Directors duly convened and held, and may consist of several documents in the like form each signed by one (1) or more of the Directors (or their alternates). The expressions “in writing” and “signed” include approval by any such Director by telefax, telex, cable, telegram, wireless or facsimile transmission or any form of electronic communication approved by the Directors for such purpose from time to time incorporating, if the Directors deem necessary, the use of security and/or identification procedures and devices approved by the Directors. Any such resolution shall be sent to each Director and shall require a response within a period specified in the notice of such resolution (being not less than seven (7) days after its date of despatch) and no such resolution shall take effect until the expiry of such period unless all Directors have waived such requirement.

115. (b) Any circular resolution of the Directors shall be shall be as effective as a resolution passed at a meeting of the Directors duly convened and held.

116. The Directors may delegate any of their powers to committees consisting of such member or members of their body as they think fit. Any committee so formed shall in the exercise of the powers so delegated conform to any regulations that may be imposed on them by the Directors.

117. The meetings and proceedings of any such committee consisting of two (2) or more members shall be governed by the provisions of these Articles regulating the meetings and proceedings of the Directors, so far as the same are applicable and are not superseded by any regulations made by the Directors under the last preceding Article.

118. All acts done by any meeting of Directors or of a committee of Directors or by any person acting as Director shall as regards all persons dealing in good faith with the Company,

notwithstanding that there was some defect in the appointment of any such Director or person acting as aforesaid or that they or any of them were disqualified or had vacated office or were not entitled to vote be as valid as if every such person had been duly appointed and was qualified and had continued to be a Director and had been entitled to vote.

119. Notwithstanding anything in these Articles, where the Company only has a sole Director, all acts required to be done or business required to be transacted by a meeting of Directors or of a committee of Directors may be done or undertaken by the sole Director and a declaration made by the sole Director and recorded and signed by the sole Director, shall be evidence that the same has been done or undertaken.

GENERAL POWERS OF THE DIRECTORS

120. Subject to the provisions of these Articles, the business of the Company shall be managed by or under the direction of the Directors. Subject to the provisions of these Articles, the Directors may exercise all the powers of the Company except any powers that this Act or the Memorandum of Association and Articles of Association of the Company require the Company to exercise in general meeting. In particular, subject to the provisions of these Articles, and without prejudice to the generality of the foregoing the Directors may at their discretion exercise every borrowing power vested in the Company together with collateral power of hypothecating the assets of the Company including any uncalled or called but unpaid capital, provided that the Directors shall not carry into effect any proposals for disposing of the whole or substantially the whole of the Company's undertaking or property unless those proposals have been approved by the Company in general meeting. Each of the Directors shall receive the following:

(a) monthly non-consolidated financial information of the Company and its subsidiaries;

(b) annual appraisals on the business of the Company by the chief executive officer, the president, the chief financial officer or the Director of the Company as at the end of each financial year of the Company;

(c) annual audited financial statements of the Company and its subsidiaries; and

(d) such other information as any Director may from time to time request.

121. The Directors may from time to time by power of attorney appoint any company, firm or person or any fluctuating body of persons whether nominated directly or indirectly by the Directors to be the attorney or attorneys of the Company for such purposes and with such powers, authorities and discretions (not exceeding those vested in or exercisable by the Directors under these Articles) and for such period and subject to such conditions as they may think fit, and any such power of attorney may contain such provisions for the protection and convenience of persons dealing with such attorney as the Directors may think fit and may also authorise any such attorney to subdelegate all or any of the powers, authorities and discretions vested in him.

122. All cheques, promissory notes, bills of exchange, and other negotiable or transferable instruments and all receipts for moneys paid to the Company shall be signed, drawn, accepted, endorsed or otherwise executed, as the case may be, in such manner as the Directors shall from time to time by resolution determine.

BORROWING POWERS

123. Subject to the provisions of these Articles, the Directors may borrow or raise money from time to time for the purpose of the Company or secure the payment of such sums as they think fit and may secure the repayment or payment of such sums by mortgage or charge upon all or any of the property or assets of the Company or by the issue of debentures or otherwise as they may think fit.

SECRETARY

124. The Secretary or Secretaries shall and a deputy or assistant secretary or Secretaries may be appointed by the Directors for such term, at such remuneration and upon such conditions as they may think fit, and any Secretary, deputy or assistant secretary so appointed may be removed by them, but without prejudice to any claim he may have for damages for breach of any contract of service between him and the Company. The appointment and duties of the Secretary or Secretaries shall not conflict with the provisions of the Act and in particular Section 171 thereof.

SEAL

125. (a) The Directors shall provide for the safe custody for the Seal, which shall only be used by the authority of the Directors or a committee of Directors authorized by the Directors in that behalf, and every instrument to which the Seal shall be affixed shall (subject to the provisions of these Articles as to certificates for shares) be signed by a Director and shall be countersigned by the Secretary or by a second Director or by some other person appointed by the Directors in place of the Secretary for the purpose.

(b) The Company may exercise the powers conferred by the Act with regard to having an Official Seal for use abroad, and such powers shall be vested in the Directors.

(c) The Company may have a duplicate Common Seal as referred to in Section 124 of the Act which shall be a facsimile of the Common Seal with the addition on its face of the words “Share Seal”.

AUTHENTICATION OF DOCUMENTS

126. Any Director or the Secretary or any person appointed by the Directors for the purpose shall have power to authenticate any documents affecting the constitution of the Company and any resolutions passed by the Company, including a resolution passed by written means, or resolutions passed by the Directors, and any books, records, documents and accounts relating to the business of the Company, and to certify copies thereof or extracts therefrom as true copies or extracts; and where any books, records, documents or accounts are elsewhere than at the Office, the local manager and other officer of the Company having the custody thereof shall be deemed to be a person appointed by the Directors as aforesaid.

127. A document purporting to be a copy of a resolution of the Directors, an extract from the minutes of a meeting of Directors or a declaration signed by a sole Director in accordance with Article 119 hereof, which is certified as such in accordance with the provisions of the last preceding Article shall be conclusive evidence in favour of all persons dealing with the Company upon the faith thereof that such resolution has been duly passed or, as the case may be, that such extract is a true and accurate record of a duly constituted or deemed meeting of the Directors. Any authentication or certification made pursuant to this Article may be made by any electronic means approved by the Directors from time to time for such purpose incorporating, if the Directors deem necessary, the use of security procedures or devices approved by the Directors.

DIVIDENDS AND RESERVES

128. Subject to Article 7A(c), Articles 7B(1)(a) and these Articles, the Company may by Ordinary Resolution declare dividends but (without prejudice to the powers of the Company to pay interest on share capital as hereinbefore provided) no dividend shall be payable except out of the profits of the Company, or in excess of the amount recommended by the Directors.

129. Subject to the rights to holders of shares with special rights as to dividend (if any), all dividends shall be declared and paid according to the number of shares (excluding treasury shares) held by each Member entitled to receive dividends, but (for the purposes of this Article only) no amount paid on a share in advance of calls shall be treated as paid on the share. All dividends shall

be apportioned and paid pro rata according to the number of shares (excluding treasury shares) held by each Member entitled to receive dividends during any portion or portions of the period in respect of which the dividend is paid, but if any share is issued on terms providing that it shall rank for dividend as from a particular date such share shall rank for dividend accordingly.

130. If and so far as in the opinion of the Directors the profits of the Company justify such payments, the Directors may pay the fixed preferential dividends on any class of shares carrying a fixed preferential dividend expressed to be payable on a fixed date on the half-yearly or other dates (if any) prescribed for the payment thereof by the terms of issue of the shares, and subject thereto may also from time to time pay to the holders of any other class of shares interim dividends thereon of such amounts and on such dates as they may think fit.

131. No dividend or other moneys payable on or in respect of a share shall bear interest against the Company.

132. The Directors may deduct from any dividend or other moneys payable to any Member on or in respect of a share all sums of money (if any) presently payable by him to the Company on account of calls or in connection therewith.

133. The Directors may retain any dividend or other moneys payable on or in respect of a share on which the Company has a lien and may apply the same in or towards satisfaction of the debts, liabilities or engagements in respect of which the lien exists.

134. The Directors may retain the dividends payable on shares in respect of which any person is under the provisions as to the transmission of shares hereinbefore contained entitled to become a Member or which any person under those provisions is entitled to transfer until such person shall become a Member in respect of such shares or shall duly transfer the same.

135. The payment by the Directors of any unclaimed dividends or other moneys payable on or in respect of a share into a separate account shall not constitute the Company a trustee in respect thereof. All dividends unclaimed after being declared may be invested or otherwise made use of by the Directors for the benefit of the Company and any dividend unclaimed after a period of six (6) years from the date of declaration of such dividend may be forfeited and if so shall revert to the Company but the Directors may at any time thereafter at their absolute discretion annul any such forfeiture and pay the dividend so forfeited to the person entitled thereto prior to the forfeiture.

136. The Company may, upon the recommendation of the Directors, by Ordinary Resolution direct payment of a dividend in whole or in part by the distribution of specific assets and in particular of paid up shares or debentures of any other company or in any one (1) or more of such ways; and the Directors shall give effect to such resolution and where any difficulty arises in regard to such distribution, the Directors may settle the same as they think expedient and in particular may fix the value for distribution of such specific assets or any part thereof and may determine that cash payments shall be made to any Members upon the footing of the value so fixed in order to adjust the rights of all parties and may vest any such specific assets in trustees as may seem expedient to the Directors.

137. Any dividend or other moneys payable in cash on or in respect of a share may be paid by cheque or warrant sent through the post to the registered address of the Member or person entitled thereto, or, if several persons are registered as joint holders of the share or are entitled thereto in consequence of the death or bankruptcy of the holder to any one (1) of such persons or to such persons and such address as such persons may by writing direct. Every such cheque or warrant shall be made payable to the order of the person to whom it is sent or to such person as the holder or joint holders or person or persons entitled to the share in consequence of the death or bankruptcy of the holder may direct and payment of the cheque if purporting to be endorsed or the receipt of any such person shall be a good discharge to the Company. Every such cheque or warrant shall be sent at the risk of the person entitled to the money represented thereby.

138. A transfer of shares shall not pass the right to any dividend declared on such shares before the registration of the transfer.

RESERVES

139. The Directors may from time to time set aside out of the profits of the Company and carry to reserve such sums as they think proper which, at the discretion of the Directors, shall be applicable for meeting contingencies or for the gradual liquidation of any debt or liability of the Company or for repairing or maintaining the works, plant and machinery of the Company or for special dividends or bonuses or for equalising dividends or for any other purpose to which the profits of the Company may properly be applied and pending such application may either be employed in the business of the Company or be invested. The Directors may divide the reserve into such special funds as they think fit and may consolidate into one (1) fund any special funds or any parts of any special funds into which the reserve may have been divided. The Directors may also without placing the same to reserve carry forward any profits which they may think it not prudent to divide.

CAPITALISATION OF PROFITS AND RESERVES

140. The Company may, upon the recommendation of the Directors, by Ordinary Resolution resolve that it is desirable to capitalise any sum for the time being standing to the credit of any of the Company's reserve accounts or any sum standing to the credit of the profit and loss account or otherwise available for distribution, provided that such sum be not required for paying the dividends on any shares carrying a fixed cumulative preferential dividend and accordingly that the Directors be authorised and directed to appropriate the sum resolved to be capitalised to the Members holding shares in the Company in the proportions in which such sum would have been divisible amongst them had the same been applied or been applicable in paying dividends and to apply such sum on their behalf either in or towards paying up the amounts (if any) for the time being unpaid on any shares held by such Members respectively, or in paying up in full unissued shares or debentures of the Company.

141. Whenever such a resolution as aforesaid shall have been passed, the Directors shall make all appropriations and applications of the sum resolved to be capitalised thereby and all allotments and issue of fully paid shares or debentures (if any) and generally shall do all acts and things required to give effect thereto with full power to the Directors to make such provision by payment in cash or otherwise as they think fit for the case of shares or debentures becoming distributable in fractions and also to authorise any person to enter on behalf of all the Members interested into an agreement with the Company providing for the allotment to them respectively, credited as fully paid up, of any further shares to which they may be entitled upon such capitalisation or (as the case may require) for the payment up by the Company on their behalf, by the application thereto of their respective proportions of the sum resolved to be capitalised, of the amounts or any part of the amounts remaining unpaid on their existing shares and any agreement made under such authority shall be effective and binding on all such Members.

MINUTES AND BOOKS

142. The Directors shall cause minutes to be made in books to be provided for the purpose:

(a) of all appointments of officers made by the Directors;

(b) of the names of the Directors present at each meeting of Directors and of any committee of Directors;

(c) of all resolutions and proceedings at all Meetings of the Company and of any class of Members, of the Directors and of committees of Directors;

(d) of all declarations made by a sole Director which is recorded and signed by the sole Director; and

(e) of all resolutions passed by written means with the indication of each Member's agreement (or agreement on his behalf) to the resolutions.

143. The Directors shall duly comply with the provisions of the Act and in particular the provisions in regard to registration of charges created by or affecting property of the Company, in regard to keeping a Register of Directors, Managers, Secretaries and auditors, the Register, a Register of Mortgages and Charges and a Register of Directors' Share and Debenture Holdings and in regard to the production and furnishing of copies of such Registers and of any Register of Holders of Debentures of the Company.

144. Any register, index, minute book, book of accounts or other book required by these Articles or by the Act to be kept by or on behalf of the Company may be kept either by making entries in bound books or by recording them in any other manner. In any case in which bound books are not used, the Directors shall take adequate precautions for guarding against falsification and for facilitating discovery.

ACCOUNTS

145. The Directors shall cause to be kept such accounting and other records as are necessary to comply with the provisions of the Act and these Articles and shall cause those records to be kept in such manner as to enable them to be conveniently and properly audited.

146. Subject to the provisions of Section 199 of the Act, the books of accounts shall be kept at the Office or at such other place or places as the Directors think fit within Singapore. No Member (other than a Director) shall have any right of inspecting any account or book or document or other recording of the Company except as is conferred by law or authorised by the Directors or by an Ordinary Resolution of the Company.

147. Subject to the provisions of the Act, the Directors shall cause to be prepared and to be laid before the Company in general meeting such profit and loss accounts, balance sheets, group accounts (if any) and reports as may be necessary.

148. Subject to the provisions of the Act, a copy of every balance sheet and profit and loss account which is to be laid before a general meeting of the Company (including every document required by the Act to be annexed thereto) together with a copy of every report of the auditors relating thereto (if required) and of the Directors' report shall not less than fourteen days before the date of the Meeting be sent to every Member of, and every holder of debentures (if any) of, the Company and to every other person who is entitled to receive notices from the Company under the provisions of the Act or of these Articles, provided that this Article shall not require a copy of these documents to be sent to any person of whose address the Company is not aware or to more than one (1) of the joint holders of a share in the Company or the several persons entitled thereto in consequence of the death or bankruptcy of the holder or otherwise but any Member to whom a copy of these documents has not been sent shall be entitled to receive a copy free of charge on application at the Office.

AUDITORS

149. Subject to provisions of the Act, auditors shall be appointed and their duties regulated in accordance with the provisions of the Act. Every auditor of the Company shall have a right of access at all times to the accounting and other records of the Company and shall make his report as required by the Act.

150. Subject to the provisions of the Act, all acts done by any person acting as an auditor shall, as regards all persons dealing in good faith with the Company, be valid, notwithstanding that there was some defect in his appointment or that he was at the time of his appointment not qualified for appointment.

151. The auditors shall be entitled to attend any general meeting and to receive all notices of and other communications relating to any general meeting to which any Member is entitled and to be heard at any general meeting on any part of the business of the Meeting which concerns them as auditors.

NOTICES

152. (a) Any notice may be given by the Company to any Member in any of the following ways:

(i) by delivering the notice personally to him; or

(ii) by sending it by prepaid mail to him at his registered address in Singapore or where such address is outside Singapore by prepaid air-mail; or

(iii) by sending cable or telex, or telefax containing the text of the notice to him at his registered address in Singapore or where such address is outside Singapore to such address or to any other address as might have been previously notified by the Member concerned to the Company; or

(iv) by electronic communication containing the text of the notice to him at an electronic mailing address as previously notified by the Member concerned to the Company for the purpose of receiving electronic communication.

(b) Any notice or other communication served under any of the provisions of these Articles on or by the Company or any officer of the Company may be tested or verified by telex or telefax or telephone or electronic means or such other manner as may be convenient in the circumstances but the Company and its officers are under no obligation so to test or verify any such notice or communication.

153. All notices and documents (including a share certificate) with respect to any shares to which persons are jointly entitled shall be given to whichever of such persons is named first on the Register and notice so given shall be sufficient notice to all the holders of such shares.

154. Any Member with a registered address shall be entitled to have served upon him at such address any notice to which he is entitled under these Articles, except where the Member has an electronic mailing address notified to the Company for the purpose of receiving electronic communication whereupon any notice may be served by the Company to the Member concerned by electronic communication at the said electronic mailing address.

155. A person entitled to a share in consequence of the death or bankruptcy of a Member or otherwise upon supplying to the Company such evidence as the Directors may reasonably require to show his title to the share, and upon supplying also an address for the service of notice, shall be entitled to have served upon him at such address any notice or document to which the Member but for his death or bankruptcy or otherwise would be entitled and such service shall for all purposes be deemed a sufficient service of such notice or document on all persons interested (whether jointly with or as claiming through or under him) in the share. Save as aforesaid any notice or document delivered or sent by post to or left at the registered address of any Member in pursuance of these Articles shall (notwithstanding that such Member be then dead or bankrupt or otherwise not entitled to such share and whether or not the Company have notice of the same) be deemed to have been duly served in respect of any share registered in the name of such Member as sole or joint holder.

156. (a) Any notice given in conformity with Article 152 shall be deemed to have been given at any of the following times as may be appropriate:

(i) when it is delivered personally to the Member, at the time when it is so delivered;

(ii) when it is sent by prepaid mail to an address in Singapore or by prepaid airmail to an address outside Singapore, on the second day following that on which the notice was put into the post; or

(iii) when the notice is sent by cable or telex, or telefax, or electronic communication, on the day it is so sent.

(b) In proving such service or sending, it shall be sufficient to prove that the letter containing the notice or document was properly addressed and put into the post office as a prepaid letter or airmail letter as the case may be or that a telex or telefax or electronic communication was properly addressed and transmitted or that a cable was properly addressed and handed to the relevant authority for despatch.

157. Any notice on behalf of the Company or of the Directors shall be deemed effectual if it purports to bear the signature of the Secretary or other duly authorised officer of the Company, whether such signature is printed or written.

158. When a given number of days' notice or notice extending over any other period is required to be given the day of service shall, unless it is otherwise provided or required by these Articles or by the Act, be not counted in such number of days or period.

159. (a) Notice of every general meeting shall be given in the manner hereinbefore authorised to:

(i) every Member;

(ii) every person entitled to a share in consequence of the death or bankruptcy or otherwise of a Member who but for the same would be entitled to receive notice of the Meeting; and

(iii) the auditor for the time being of the Company.

(b) No other person shall be entitled to receive notices of general meetings.

160. The provisions of Articles 152, 156, 157 and 158 shall apply mutatis mutandis to notices of meetings of Directors or any committee of Directors.

WINDING UP

161. Subject to the provisions of these Articles and the Act, if the Company is wound up (whether the liquidation is voluntary, under supervision, or by the Court) the liquidator may, with the authority of a Special Resolution, divide among the Members in specie or kind the whole or any part of the assets of the Company and whether or not the assets shall consist of property of one (1) kind or shall consist of properties of different kinds and may for such purpose set such value as he deems fair upon any one (1) or more class or classes or property to be divided as aforesaid and may determine how such division shall be carried out between the Members or different classes of Members. The liquidator may, with the like authority, vest the whole or any part of the assets in trustees upon such trusts for the benefit of Members as the liquidator with the like authority thinks fit and the liquidation of the Company may be closed and the Company dissolved but so that no Member shall be compelled to accept any shares or other securities in respect of which there is a liability.

INDEMNITY

162. Subject to the provisions of the Act, every Director, Auditor, Secretary or other officer of the Company shall be entitled to be indemnified by the Company against all costs, charges, losses, expenses and liabilities incurred by him in the execution and discharge of his duties or in relation thereto and in particular and without prejudice to the generality of the foregoing no Director, Manager,

Secretary or other officer of the Company shall be liable for the acts, receipts, neglects or defaults of any other Director or officer or for joining in any receipt or other act for conformity or for any loss or expense happening to the Company through the insufficiency or deficiency of title to any property acquired by order of the Directors for or on behalf of the Company or for the insufficiency or deficiency of any security in or upon which any of the moneys of the Company shall be invested or for any loss or damage arising from the bankruptcy, insolvency or tortious act of any person with whom any moneys, securities or effects shall be deposited or left or for any other loss, damage or misfortune whatever which shall happen in the execution of the duties of his office or in relation thereto unless the same happen through his own negligence, wilful default, breach of duty or breach of trust.

SECRECY

163. (a) No Member shall be entitled to require discovery of or any information respecting any detail of the Company's trade or any matter which may be in the nature of a trade secret, mystery of trade or secret process which may relate to the conduct of the business of the Company and which in the opinion of the Directors it will be inexpedient in the interest of the Members of the Company to communicate to the public save as may be authorised by law.

163. (b) Without prejudice to Article 163(a), the Board of Directors and the Members shall be fully informed as to all financial and business affairs of the Company.

Exhibit 4.2

Execution Copy

WAVE LIFE SCIENCES PTE. LTD.
INVESTORS' RIGHTS AGREEMENT

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WAVE LIFE SCIENCES PTE. LTD.
INVESTORS' RIGHTS AGREEMENT

THIS INVESTORS' RIGHTS AGREEMENT (this "**Agreement**"), is made as of the 14th day of August, 2015, by and among Wave Life Sciences Pte. Ltd., a company incorporated in Singapore (the "**Company**"), each of the investors listed on Schedule A hereto, each of which is referred to in this Agreement as an "**Investor**".

RECITALS

WHEREAS, certain of the Investors (the "**Existing Investors**") hold shares of the Company's Ordinary Shares and possess registration rights, information rights, rights of first offer, and other rights pursuant to an Amended and Restated Shareholders Agreement dated as of January 16, 2015 between the Company and such Investors (the "**Shareholders Agreement**"); and

WHEREAS, the Existing Investors are holders of at least seventy-five percent (75%) of the Company's Ordinary Shares and desire to terminate the Shareholders Agreement in its entirety and to accept the rights created pursuant to this Agreement in lieu of the rights granted to them under the Shareholders Agreement; and

WHEREAS, certain of the Investors are parties to that certain Series B Preferred Share Subscription Agreement of even date herewith between the Company and certain of the Investors (the "**Subscription Agreement**"), under which certain of the Company's and such Investors' obligations are conditioned upon the execution and delivery of this Agreement by such Investors and Existing Investors holding at least seventy-five percent (75%) of the Company's Ordinary Shares and the Company;

NOW, THEREFORE, the Existing Investors hereby agree that the Shareholders Agreement shall be superseded and replaced in its entirety by this Agreement, and the parties to this Agreement further agree as follows:

1. Definitions. For purposes of this Agreement:

1.1 "**Affiliate**" means, with respect to any specified Person, any other Person who, directly or indirectly, controls, is controlled by, or is under common control with such Person, including without limitation any general partner, managing member, officer or director of such Person or any venture capital fund now or hereafter existing that is controlled by one or more general partners or managing members of, or shares the same management company with, such Person.

1.2 "**Damages**" means any loss, damage, claim or liability (joint or several) to which a party hereto may become subject under the Securities Act, the Exchange Act, or other federal or state law, insofar as such loss, damage, claim or liability (or any action in respect thereof) arises out of or is based upon: (i) any untrue statement or alleged untrue statement of a material fact contained in any registration statement of the Company, including any preliminary prospectus or final prospectus contained therein or any amendments or supplements thereto; (ii) an omission or alleged omission to state therein a material fact required to be stated therein, or

necessary to make the statements therein not misleading; or (iii) any violation or alleged violation by the indemnifying party (or any of its agents or Affiliates) of the Securities Act, the Exchange Act, any state securities law, or any rule or regulation promulgated under the Securities Act, the Exchange Act, or any state securities law.

1.3 "**Derivative Securities**" means any securities or rights convertible into, or exercisable or exchangeable for (in each case, directly or indirectly), Ordinary Shares, including options and warrants.

1.4 "**Exchange Act**" means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

1.5 "**Excluded Registration**" means (i) a registration relating to the sale of securities to employees of the Company or a subsidiary pursuant to a share option, share purchase, or similar plan; (ii) a registration relating to an SEC Rule 145 transaction; (iii) a registration on any form that does not include substantially the same information as would be required to be included in a registration statement covering the sale of the Registrable Securities; or (iv) a registration in which the only Ordinary Shares being registered is Ordinary Shares issuable upon conversion of debt securities that are also being registered.

1.6 "**Fidelity**" means Fidelity Management & Research Company and its Affiliates.

1.7 "**FOIA Party**" means a Person that, in the reasonable determination of the Board of Directors, may be subject to, and thereby required to disclose non-public information furnished by or relating to the Company under, the Freedom of Information Act, 5 U.S.C. 552 ("**FOIA**"), any state public records access law, any state or other jurisdiction's laws similar in intent or effect to FOIA, or any other similar statutory or regulatory requirement.

1.8 "**Foresite**" means Foresite Capital Fund III, L.P.

1.9 "**Form S-1**" means such form under the Securities Act as in effect on the date hereof or any successor registration form under the Securities Act subsequently adopted by the SEC.

1.10 "**Form S-3**" means such form under the Securities Act as in effect on the date hereof or any registration form under the Securities Act subsequently adopted by the SEC that permits incorporation of substantial information by reference to other documents filed by the Company with the SEC.

1.11 "**GAAP**" means generally accepted accounting principles in the United States.

1.12 "**Holder**" means any holder of Registrable Securities who is a party to this Agreement.

1.13 "**Immediate Family Member**" means a child, stepchild, grandchild, parent, stepparent, grandparent, spouse, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law, including, adoptive relationships, of a natural person referred to herein.

1.14 "**Initiating Holders**" means, collectively, Holders who properly initiate a registration request under this Agreement.

1.15 "**Investor Ordinary Shares**" means the Ordinary Shares held by the Investors on the date hereof.

1.16 "**IPO**" means the Company's first underwritten public offering of its Ordinary Shares under the Securities Act.

1.17 "**Jennison**" means "(i) Jennison Global Healthcare Master Fund, Ltd. and (ii) without duplication of the immediately preceding clause (i), each Investor that is an advisory client of Jennison Associates LLC and each successor or affiliated investment advisor to each such Investor.

1.18 "**Major Investor**" means any Investor that, individually or together with such Investor's Affiliates, holds at least 300,000 shares of Registrable Securities (as adjusted for any share split, share dividend, combination, or other recapitalization or reclassification effected after the date hereof), and each of Jennison and New Leaf for so long as such Investors holds the number of shares of Registrable Securities it holds on the date hereof (as adjusted for any share split, share dividend, combination, or other recapitalization or reclassification effected after the date hereof).

1.19 "**New Leaf**" means New Leaf Growth Fund I, L.P.

1.20 "**New Securities**" means, collectively, equity securities of the Company, whether or not currently authorized, as well as rights, options, or warrants to purchase such equity securities, or securities of any type whatsoever that are, or may become, convertible or exchangeable into or exercisable for such equity securities.

1.21 "**Ordinary Shares**" means the ordinary shares in the Company's share capital.

1.22 "**Person**" means any individual, corporation, partnership, trust, limited liability company, association or other entity.

1.23 "**Registrable Securities**" means (i) the Ordinary Shares issuable or issued upon conversion of the Series B Preferred Shares and (ii) the Investor Ordinary Shares; excluding in all cases, however, any Registrable Securities sold by a Person in a transaction in which the **applicable** rights under this Agreement are not assigned pursuant to Subsection 6.1, and excluding for purposes of Section 2 any shares for which registration rights have terminated pursuant to Subsection 2.13 of this Agreement.

1.24 "**Registrable Securities then outstanding**" means the number of shares determined by adding the number of Ordinary Shares in issue that are Registrable Securities and the number of Ordinary Shares issuable upon conversion of the Series B Preferred Shares in issue.

1.25 "**Restated Articles**" means the Company's Memorandum of Association and Articles of Association that took effect on or about the date of the Subscription Agreement.

1.26 "**Restricted Securities**" means the securities of the Company required to be notated with the legend set forth in Subsection 2.12(b) hereof.

1.27 "**SEC**" means the Securities and Exchange Commission.

1.28 "**SEC Rule 144**" means Rule 144 promulgated by the SEC under the Securities Act.

1.29 "**SEC Rule 145**" means Rule 145 promulgated by the SEC under the Securities Act.

1.30 "**Securities Act**" means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

1.31 "**Selling Expenses**" means all underwriting discounts, selling commissions, and share transfer Taxes applicable to the sale of Registrable Securities, and fees and disbursements of counsel for any Holder, except for the fees and disbursements of the Selling Holder Counsel borne and paid by the Company as provided in Subsection 2.6.

1.32 "**Series B Preferred Shares**" means the Company's Series B Preferred Shares.

Capitalized terms not otherwise defined in this Agreement shall have the meanings ascribed to them in the Subscription Agreement.

2. Registration Rights. The Company covenants and agrees as follows:

2.1 Demand Registration.

(a) Form S-1 Demand. If at any time after one hundred eighty (180) days after the effective date of the registration statement for the IPO, the Company receives a request from Holders of fifty percent (50%) of the Registrable Securities then outstanding that the Company file a Form S-1 registration statement with respect to fifty percent (50%) of the Registrable Securities then outstanding having an anticipated aggregate offering price, net of Selling Expenses, of at least $25 million), then the Company shall (x) within ten (10) days after the date such request is given, give notice thereof (the "**Demand Notice**") to all Holders other than the Initiating Holders; and (y) as soon as practicable, and in any event within sixty (60) days after the date such request is given by the Initiating Holders, file a Form S-1 registration statement under the Securities Act covering all Registrable Securities that the Initiating Holders requested to be registered and any additional Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within twenty (20) days of the date the Demand Notice is given, and in each case, subject to the limitations of Subsections 2.1(c) and 2.3.

(b) Form S-3 Demand. If at any time when it is eligible to use a Form S-3 registration statement, the Company receives a request from Holders of at least thirty percent (30%) of the Registrable Securities then outstanding that the Company file a Form S-3 registration statement with respect to Registrable Securities of such Holders having an anticipated aggregate offering price, net of Selling Expenses, of at least $5 million, then the Company shall (i) within ten (10) days after the date such request is given, give a Demand Notice to all Holders other than the Initiating Holders; and (ii) as soon as practicable, and in any event within forty-five (45) days after the date such request is given by the Initiating Holders, file a Form S-3 registration statement under the Securities Act covering all Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within twenty (20) days of the date the Demand Notice is given, and in each case, subject to the limitations of Subsections 2.1(c) and 2.3.

(c) Notwithstanding the foregoing obligations, if the Company furnishes to Holders requesting a registration pursuant to this Subsection 2.1 a certificate signed by the Company's chief executive officer stating that in the good faith judgment of the Company's Board of Directors it would be materially detrimental to the Company and its shareholders for such registration statement to either become effective or remain effective for as long as such registration statement otherwise would be required to remain effective, because such action would (i) materially interfere with a significant acquisition, corporate reorganization, or other similar transaction involving the Company; (ii) require premature disclosure of material information that the Company has a bona fide business purpose for preserving as confidential; or (iii) render the Company unable to comply with requirements under the Securities Act or Exchange Act, then the Company shall have the right to defer taking action with respect to such filing, and any time periods with respect to filing or effectiveness thereof shall be tolled correspondingly, for a period of not more than one hundred twenty (120) days after the request of the Initiating Holders is given; provided, however, that the Company may not invoke this right more than once in any twelve (12) month period.

(d) The Company shall not be obligated to effect, or to take any action to effect, any registration (i) after the Company has effected one registration pursuant to Subsection 2.1(a); or (iii) if the Initiating Holders propose to dispose of shares of Registrable Securities that may be immediately registered on Form S-3 pursuant to a request made pursuant to Subsection 2.1(b). The Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to Subsection 2.1(b) (i) during the period that is thirty (30) days before the Company's good faith estimate of the date of filing of, and ending on a date that is ninety (90) days after the effective date of, a Company-initiated registration, provided that the Company is actively employing in good faith commercially reasonable efforts to cause such registration statement to become effective; or (ii) if the Company has effected one registration pursuant to Subsection 2.1(b) within the twelve (12) month period immediately preceding the date of such request. A registration shall not be counted as "effected" for purposes of this Subsection 2.1(d) until such time as the applicable registration statement has been declared effective by the SEC, unless the Initiating Holders withdraw their request for such registration, elect not to pay the registration expenses therefor, and forfeit their right to one demand registration statement pursuant to Subsection 2.6, in which case such withdrawn registration statement shall be counted as "effected" for purposes of this Subsection 2.1(d).

2.2 Company Registration. If the Company proposes to register (including, for this purpose, a registration effected by the Company for shareholders other than the Holders) any of its Ordinary Shares under the Securities Act in connection with the public offering of such securities solely for cash (other than in an Excluded Registration), the Company shall, at such time, promptly give each Holder notice of such registration. Upon the request of each Holder given within twenty (20) days after such notice is given by the Company, the Company shall, subject to the provisions of Subsection 2.3, cause to be registered all of the Registrable Securities that each such Holder has requested to be included in such registration. The Company shall have the right to terminate or withdraw any registration initiated by it under this Subsection 2.2 before the effective date of such registration, whether or not any Holder has elected to include Registrable Securities in such registration. The expenses (other than Selling Expenses) of such withdrawn registration shall be borne by the Company in accordance with Subsection 2.6.

2.3 Underwriting Requirements.

(a) If, pursuant to Subsection 2.1, the Initiating Holders intend to distribute the Registrable Securities covered by their request by means of an underwriting, they shall so advise the Company as a part of their request made pursuant to Subsection 2.1, and the Company shall include such information in the Demand Notice. The underwriter(s) will be selected by the Company and shall be reasonably acceptable to a majority in interest of the Initiating Holders. In such event, the right of any Holder to include such Holder's Registrable Securities in such registration shall be conditioned upon such Holder's participation in such underwriting and the inclusion of such Holder's Registrable Securities in the underwriting to the extent provided herein. All Holders proposing to distribute their securities through such underwriting shall (together with the Company as provided in Subsection 2.4(e)) enter into an underwriting agreement in customary form with the underwriter(s) selected for such underwriting. Notwithstanding any other provision of this Subsection 2.3, if the managing underwriter(s) advise(s) the Initiating Holders in writing that marketing factors require a limitation on the number of shares to be underwritten, then the Initiating Holders shall so advise all Holders of Registrable Securities that otherwise would be underwritten pursuant hereto, and the number of Registrable Securities that may be included in the underwriting shall be allocated among such Holders of Registrable Securities, including the Initiating Holders, in proportion (as nearly as practicable) to the number of Registrable Securities owned by each Holder or in such other proportion as shall mutually be agreed to by all such selling Holders; provided, however, that the number of Registrable Securities held by the Holders to be included in such underwriting shall not be reduced unless all other securities are first entirely excluded from the underwriting. To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round the number of shares allocated to any Holder to the nearest one hundred (100) shares.

(b) In connection with any offering involving an underwriting of the Company's share capital pursuant to Subsection 2.2, the Company shall not be required to include any of the Holders' Registrable Securities in such underwriting unless the Holders accept the terms of the underwriting as agreed upon between the Company and its underwriters, and then only in such quantity as the underwriters in their sole discretion determine will not jeopardize the success of the offering by the Company. If the total number of securities, including Registrable Securities, requested by shareholders to be included in such offering

exceeds the number of securities to be sold (other than by the Company) that the underwriters in their reasonable discretion determine is compatible with the success of the offering, then the Company shall be required to include in the offering only that number of such securities, including Registrable Securities, which the underwriters and the Company in their sole discretion determine will not jeopardize the success of the offering. If the underwriters determine that less than all of the Registrable Securities requested to be registered can be included in such offering, then the Registrable Securities that are included in such offering shall be allocated among the selling Holders in proportion (as nearly as practicable to) the number of Registrable Securities owned by each selling Holder or in such other proportions as shall mutually be agreed to by all such selling Holders. To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round the number of shares allocated to any Holder to the nearest one hundred (100) shares. Notwithstanding the foregoing, in no event shall (i) the number of Registrable Securities included in the offering be reduced unless all other securities (other than securities to be sold by the Company) are first entirely excluded from the offering, or (ii) the number of Registrable Securities included in the offering be reduced below twenty percent (20-%) of the total number of securities included in such offering, unless such offering is the IPO, in which case the selling Holders may be excluded further if the underwriters make the determination described above and no other shareholder's securities are included in such offering. For purposes of the provision in this Subsection 2.3(b) concerning apportionment, for any selling Holder that is a partnership, limited liability company, or corporation, the partners, members, retired partners, retired members, shareholders, and Affiliates of such Holder, or the estates and Immediate Family Members of any such partners, retired partners, members, and retired members and any trusts for the benefit of any of the foregoing Persons, shall be deemed to be a single "selling Holder," and any pro rata reduction with respect to such "selling Holder" shall be based upon the aggregate number of Registrable Securities owned by all Persons included in such "selling Holder," as defined in this sentence.

2.4 Obligations of the Company. Whenever required under this Section 2 to effect the registration of any Registrable Securities, the Company shall, as expeditiously as reasonably possible:

(a) prepare and file with the SEC a registration statement with respect to such Registrable Securities and use its commercially reasonable efforts to cause such registration statement to become effective and, upon the request of the Holders of a majority of the Registrable Securities registered thereunder, keep such registration statement effective for a period of up to one hundred eighty (180) days or, if earlier, until the distribution contemplated in the registration statement has been completed; provided, however, that (i) such one hundred eighty (180) day period shall be extended for a period of time equal to the period the Holder refrains, at the request of an underwriter of Ordinary Shares (or other securities) of the Company, from selling any securities included in such registration, and (ii) in the case of any registration of Registrable Securities on Form S-3 that are intended to be offered on a continuous or delayed basis, subject to compliance with applicable SEC rules, such one hundred eighty (180) day period shall be extended for up to eighteen (18) days, if necessary, to keep the registration statement effective until all such Registrable Securities are sold;

(b) prepare and file with the SEC such amendments and supplements to such registration statement, and the prospectus used in connection with such registration statement, as may be necessary to comply with the Securities Act in order to enable the disposition of all securities covered by such registration statement;

(c) furnish to the selling Holders such numbers of copies of a prospectus, including a preliminary prospectus, as required by the Securities Act, and such other documents as the Holders may reasonably request in order to facilitate their disposition of their Registrable Securities;

(d) use its commercially reasonable efforts to register and qualify the securities covered by such registration statement under such other securities or blue-sky laws of such jurisdictions as shall be reasonably requested by the selling Holders; provided that the Company shall not be required to qualify to do business or to file a general consent to service of process in any such states or jurisdictions, unless the Company is already subject to service in such jurisdiction and except as may be required by the Securities Act;

(e) in the event of any underwritten public offering, enter into and perform its obligations under an underwriting agreement, in usual and customary form, with the underwriter(s) of such offering;

(f) use its commercially reasonable efforts to cause all such Registrable Securities covered by such registration statement to be listed on a national securities exchange or trading system and each securities exchange and trading system (if any) on which similar securities issued by the Company are then listed;

(g) provide a transfer agent and registrar for all Registrable Securities registered pursuant to this Agreement and provide a CUSIP number for all such Registrable Securities, in each case not later than the effective date of such registration;

(h) promptly make available for inspection by the selling Holders, any managing underwriter(s) participating in any disposition pursuant to such registration statement, and any attorney or accountant or other agent retained by any such underwriter or selected by the selling Holders, all financial and other records, pertinent corporate documents, and properties of the Company, and cause the Company's officers, directors, employees, and independent accountants to supply all information reasonably requested by any such seller, underwriter, attorney, accountant, or agent, in each case, as necessary or advisable to verify the accuracy of the information in such registration statement and to conduct appropriate due diligence in connection therewith;

(i) notify each selling Holder, promptly after the Company receives notice thereof, of the time when such registration statement has been declared effective or a supplement to any prospectus forming a part of such registration statement has been filed; and

(j) after such registration statement becomes effective, notify each selling Holder of any request by the SEC that the Company amend or supplement such registration statement or prospectus.

In addition, the Company shall ensure that, at all times after any registration statement covering a public offering of securities of the Company under the Securities Act shall have become effective, its insider trading policy shall provide that the Company's directors may implement a trading program under Rule 10b5-1 of the Exchange Act.

2.5 Furnish Information. It shall be a condition precedent to the obligations of the Company to take any action pursuant to this Section 2 with respect to the Registrable Securities of any selling Holder that such Holder shall furnish to the Company such information regarding itself, the Registrable Securities held by it, and the intended method of disposition of such securities as is reasonably required to effect the registration of such Holder's Registrable Securities.

2.6 Expenses of Registration. All expenses (other than Selling Expenses) incurred in connection with registrations, filings, or qualifications pursuant to Section 2, including all registration, filing, and qualification fees; printers' and accounting fees; fees and disbursements of counsel for the Company; and the reasonable fees and disbursements, not to exceed $25,000, of one counsel for the selling Holders ("**Selling Holder Counsel**"), shall be borne and paid by the Company; provided, however, that the Company shall not be required to pay for any expenses of any registration proceeding begun pursuant to Subsection 2.1 if the registration request is subsequently withdrawn at the request of the Holders of a majority of the Registrable Securities to be registered (in which case all selling Holders shall bear such expenses pro rata based upon the number of Registrable Securities that were to be included in the withdrawn registration), unless the Holders of a majority of the Registrable Securities agree to forfeit their right to one registration pursuant to Subsections 2.1(a) or 2.1(b), as the case may be; provided further that if, at the time of such withdrawal, the Holders shall have learned of a material adverse change in the condition, business, or prospects of the Company from that known to the Holders at the time of their request and have withdrawn the request with reasonable promptness after learning of such information then the Holders shall not be required to pay any of such expenses and shall not forfeit their right to one registration pursuant to Subsections 2.1(a) or 2.1(b). All Selling Expenses relating to Registrable Securities registered pursuant to this Section 2 shall be borne and paid by the Holders pro rata on the basis of the number of Registrable Securities registered on their behalf.

2.7 Delay of Registration. No Holder shall have any right to obtain or seek an injunction restraining or otherwise delaying any registration pursuant to this Agreement as the result of any controversy that might arise with respect to the interpretation or implementation of this Section 2.

2.8 Indemnification. If any Registrable Securities are included in a registration statement under this Section 2:

(a) To the extent permitted by law, the Company will indemnify and hold harmless each selling Holder, and the partners, members, officers, directors, and shareholders of each such Holder; legal counsel and accountants for each such Holder; any underwriter (as defined in the Securities Act) for each such Holder; and each Person, if any, who controls such Holder or underwriter within the meaning of the Securities Act or the Exchange Act, against any Damages, and the Company will pay to each such Holder, underwriter, controlling Person, or other aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from

which Damages may result, as such expenses are incurred; provided, however, that the indemnity agreement contained in this Subsection 2.8(a) shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of the Company, which consent shall not be unreasonably withheld, nor shall the Company be liable for any Damages to the extent that they arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of any such Holder, underwriter, controlling Person, or other aforementioned Person expressly for use in connection with such registration.

(b) To the extent permitted by law, each selling Holder, severally and not jointly, will indemnify and hold harmless the Company, and each of its directors, each of its officers who has signed the registration statement, each Person (if any), who controls the Company within the meaning of the Securities Act, legal counsel and accountants for the Company, any underwriter (as defined in the Securities Act), any other Holder selling securities in such registration statement, and any controlling Person of any such underwriter or other Holder, against any Damages, in each case only to the extent that such Damages arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of such selling Holder expressly for use in connection with such registration; and each such selling Holder will pay to the Company and each other aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from which Damages may result, as such expenses are incurred; provided, however, that the indemnity agreement contained in this Subsection 2.8(b) shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of the Holder, which consent shall not be unreasonably withheld; and provided further that in no event shall the aggregate amounts payable by any Holder by way of indemnity or contribution under Subsections 2.8(b) and 2.8(d) exceed the proceeds from the offering received by such Holder (net of any Selling Expenses paid by such Holder), except in the case of fraud or willful misconduct by such Holder.

(c) Promptly after receipt by an indemnified party under this Subsection 2.8 of notice of the commencement of any action (including any governmental action) for which a party may be entitled to indemnification hereunder, such indemnified party will, if a claim in respect thereof is to be made against any indemnifying party under this Subsection 2.8, give the indemnifying party notice of the commencement thereof. The indemnifying party shall have the right to participate in such action and, to the extent the indemnifying party so desires, participate jointly with any other indemnifying party to which notice has been given, and to assume the defense thereof with counsel mutually satisfactory to the parties; provided, however, that an indemnified party (together with all other indemnified parties that may be represented without conflict by one counsel) shall have the right to retain one separate counsel, with the fees and expenses to be paid by the indemnifying party, if representation of such indemnified party by the counsel retained by the indemnifying party would be inappropriate due to actual or potential differing interests between such indemnified party and any other party represented by such counsel in such action. The failure to give notice to the indemnifying party within a reasonable time of the commencement of any such action shall relieve such indemnifying party of any liability to the indemnified party under this Subsection 2.8, to the extent that such failure materially prejudices the indemnifying party's ability to defend such action. The failure to give notice to the indemnifying party will not relieve it of any liability that it may have to any indemnified party otherwise than under this Subsection 2.8.

(d) To provide for just and equitable contribution to joint liability under the Securities Act in any case in which either: (i) any party otherwise entitled to indemnification hereunder makes a claim for indemnification pursuant to this Subsection 2.8 but it is judicially determined (by the entry of a final judgment or decree by a court of competent jurisdiction and the expiration of time to appeal or the denial of the last right of appeal) that such indemnification may not be enforced in such case, notwithstanding the fact that this Subsection 2.8 provides for indemnification in such case, or (ii) contribution under the Securities Act may be required on the part of any party hereto for which indemnification is provided under this Subsection 2.8, then, and in each such case, such parties will contribute to the aggregate losses, claims, damages, liabilities, or expenses to which they may be subject (after contribution from others) in such proportion as is appropriate to reflect the relative fault of each of the indemnifying party and the indemnified party in connection with the statements, omissions, or other actions that resulted in such loss, claim, damage, liability, or expense, as well as to reflect any other relevant equitable considerations. The relative fault of the indemnifying party and of the indemnified party shall be determined by reference to, among other things, whether the untrue or allegedly untrue statement of a material fact, or the omission or alleged omission of a material fact, relates to information supplied by the indemnifying party or by the indemnified party and the parties' relative intent, knowledge, access to information, and opportunity to correct or prevent such statement or omission; provided, however, that, in any such case (x) no Holder will be required to contribute any amount in excess of the public offering price of all such Registrable Securities offered and sold by such Holder pursuant to such registration statement, and (y) no Person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) will be entitled to contribution from any Person who was not guilty of such fraudulent misrepresentation; and provided further that in no event shall a Holder's liability pursuant to this Subsection 2.8(d), when combined with the amounts paid or payable by such Holder pursuant to Subsection 2.8(b), exceed the proceeds from the offering received by such Holder (net of any Selling Expenses paid by such Holder), except in the case of willful misconduct or fraud by such Holder.

(e) Notwithstanding the foregoing, to the extent that the provisions on indemnification and contribution contained in the underwriting agreement entered into in connection with the underwritten public offering are in conflict with the foregoing provisions, the provisions in the underwriting agreement shall control.

(f) Unless otherwise superseded by an underwriting agreement entered into in connection with the underwritten public offering, the obligations of the Company and Holders under this Subsection 2.8 shall survive the completion of any offering of Registrable Securities in a registration under this Section 2, and otherwise shall survive the termination of this Agreement.

2.9 Reports Under Exchange Act. With a view to making available to the Holders the benefits of SEC Rule 144 and any other rule or regulation of the SEC that may at any time permit a Holder to sell securities of the Company to the public without registration or pursuant to a registration on Form S 3, the Company shall:

(a) make and keep available adequate current public information, as those terms are understood and defined in SEC Rule 144, at all times after the effective date of the registration statement filed by the Company for the IPO;

(b) use commercially reasonable efforts to file with the SEC in a timely manner all reports and other documents required of the Company under the Securities Act and the Exchange Act (at any time after the Company has become subject to such reporting requirements); and

(c) furnish to any Holder, so long as the Holder owns any Registrable Securities, forthwith upon request (i) to the extent accurate, a written statement by the Company that it has complied with the reporting requirements of SEC Rule 144 (at any time after ninety (90) days after the effective date of the registration statement filed by the Company for the IPO), the Securities Act, and the Exchange Act (at any time after the Company has become subject to such reporting requirements), or that it qualifies as a registrant whose securities may be resold pursuant to Form S 3 (at any time after the Company so qualifies); and (iii) such other information as may be reasonably requested in availing any Holder of any rule or regulation of the SEC that permits the selling of any such securities without registration (at any time after the Company has become subject to the reporting requirements under the Exchange Act) or pursuant to Form S 3 (at any time after the Company so qualifies to use such form).

2.10 Limitations on Subsequent Registration Rights. From and after the date of this Agreement, the Company shall not, without the prior written consent of the Holders of a majority of the Registrable Securities then outstanding, enter into any agreement with any holder or prospective holder of any securities of the Company that would allow such holder or prospective holder (i) to include such securities in any registration unless, under the terms of such agreement, such holder or prospective holder may include such securities in any such registration only to the extent that the inclusion of such securities will not reduce the number of the Registrable Securities of the Holders that are included; provided that this limitation shall not apply to any additional Investor who becomes a party to this Agreement in accordance with Subsection 6.9.

2.11 "Market Stand off" Agreement. Each Holder hereby agrees that it will not, without the prior written consent of the managing underwriter, during the period commencing on the date of the final prospectus relating to the registration by the Company of its Ordinary Shares or any other equity securities under the Securities Act on a registration statement on Form S-1 or Form S-3, and ending on the date specified by the Company and the managing underwriter (such period not to exceed one hundred eighty (180) days in the case of the IPO, or such other period as may be requested by the Company or an underwriter to accommodate regulatory restrictions on (1) the publication or other distribution of research reports, and (2) analyst recommendations and opinions, including, but not limited to, the restrictions contained in FINRA Rule 2711(f)(4) or NYSE Rule 472(f)(4), or any successor

provisions or amendments thereto), or ninety (90) days in the case of any registration other than the IPO, or such other period as may be requested by the Company or an underwriter to accommodate regulatory restrictions on (1) the publication or other distribution of research reports and (2) analyst recommendations and opinions, including, but not limited to, the restrictions contained in FINRA Rule 2711(f)(4) or NYSE Rule 472(f)(4), or any successor provisions or amendments thereto), (i) lend; offer; pledge; sell; contract to sell; sell any option or contract to purchase; purchase any option or contract to sell; grant any option, right, or warrant to purchase; or otherwise transfer or dispose of, directly or indirectly, any Ordinary Shares or any securities convertible into or exercisable or exchangeable (directly or indirectly) for Ordinary Shares held immediately before the effective date of the registration statement for such offering or (ii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of such securities, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of Ordinary Shares or other securities, in cash, or otherwise. The foregoing provisions of this Subsection 2.11 shall only apply to the IPO and shall not apply to the sale of any shares to an underwriter pursuant to an underwriting agreement, or the transfer of any shares to any trust for the direct or indirect benefit of the Holder or the immediate family of the Holder, provided that the trustee of the trust agrees to be bound in writing by the restrictions set forth herein, and provided further that any such transfer shall not involve a disposition for value, and shall be applicable to the Holders only if all officers and directors are subject to the same restrictions. The underwriters in connection with such registration are intended third party beneficiaries of this Subsection 2.11 and shall have the right, power and authority to enforce the provisions hereof as though they were a party hereto. Each Holder further agrees to execute such agreements as may be reasonably requested by the underwriters in connection with such registration that are consistent with this Subsection 2.11 or that are necessary to give further effect thereto. Any discretionary waiver or termination of the restrictions of any or all of such agreements by the Company or the underwriters shall apply pro rata to all Holders subject to such agreements, based on the number of shares subject to such agreements.

2.12 Restrictions on Transfer.

(a) The Registrable Securities shall not be sold, pledged, or otherwise transferred, and the Company shall not recognize and shall issue stop-transfer instructions to its transfer agent with respect to any such sale, pledge, or transfer, except upon the conditions specified in this Agreement, which conditions are intended to ensure compliance with the provisions of the Securities Act. A transferring Holder will cause any proposed purchaser, pledgee, or transferee of the Registrable Securities held by such Holder to agree to take and hold such securities subject to the provisions and upon the conditions specified in this Agreement.

(b) Each certificate, instrument, or book entry representing (i) the Registrable Securities, and (ii) any other securities issued in respect of the securities referenced in clauses (i) and (ii), upon any share split, share dividend, recapitalization, merger, consolidation, or similar event, shall (unless otherwise permitted by the provisions of Subsection 2.12(c)) be notated with a legend substantially in the following form:

THE SECURITIES REPRESENTED HEREBY HAVE BEEN ACQUIRED FOR INVESTMENT AND HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933. SUCH SHARES MAY NOT BE SOLD, PLEDGED, OR TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION OR A VALID EXEMPTION FROM THE REGISTRATION AND PROSPECTUS DELIVERY REQUIREMENTS OF SAID ACT.

THE SECURITIES REPRESENTED HEREBY MAY BE TRANSFERRED ONLY IN ACCORDANCE WITH THE TERMS OF AN AGREEMENT BETWEEN THE COMPANY AND THE SHAREHOLDER, A COPY OF WHICH IS ON FILE WITH THE SECRETARY OF THE COMPANY.

The Holders consent to the Company making a notation in its records and giving instructions to any transfer agent of the Restricted Securities in order to implement the restrictions on transfer set forth in this Subsection 2.12.

(c) The holder of such Restricted Securities, by acceptance of ownership thereof, agrees to comply in all respects with the provisions of this Section 2. Before any proposed sale, pledge, or transfer of any Restricted Securities, unless there is in effect a registration statement under the Securities Act covering the proposed transaction, the Holder thereof shall give notice to the Company of such Holder's intention to effect such sale, pledge, or transfer. Each such notice shall describe the manner and circumstances of the proposed sale, pledge, or transfer in sufficient detail and, if reasonably requested by the Company, shall be accompanied at such Holder's expense by either (i) a written opinion of legal counsel who shall, and whose legal opinion shall, be reasonably satisfactory to the Company, addressed to the Company, to the effect that the proposed transaction may be effected without registration under the Securities Act; (ii) a "no action" letter from the SEC to the effect that the proposed sale, pledge, or transfer of such Restricted Securities without registration will not result in a recommendation by the staff of the SEC that action be taken with respect thereto; or (iii) any other evidence reasonably satisfactory to counsel to the Company to the effect that the proposed sale, pledge, or transfer of the Restricted Securities may be effected without registration under the Securities Act, whereupon the Holder of such Restricted Securities shall be entitled to sell, pledge, or transfer such Restricted Securities in accordance with the terms of the notice given by the Holder to the Company. The Company will not require such a legal opinion or "no action" letter (x) in any transaction in compliance with SEC Rule 144; or (y) in any transaction in which such Holder distributes Restricted Securities to an Affiliate of such Holder for no consideration; provided that each transferee agrees in writing to be subject to the terms of this Subsection 2.12. Each certificate, instrument, or book entry representing the Restricted Securities transferred as above provided shall be notated with, except if such transfer is made pursuant to SEC Rule 144, the appropriate restrictive legend set forth in Subsection 2.12(b), except that such certificate instrument, or book entry shall not be notated with such restrictive legend if, in the opinion of counsel for such Holder and the Company, such legend is not required in order to establish compliance with any provisions of the Securities Act.

2.13 Termination of Registration Rights. The right of any Holder to request registration or inclusion of Registrable Securities in any registration pursuant to Subsections 2.1 or 2.2 shall terminate upon the earliest to occur of:

(a) the closing of a Deemed Liquidation Event, as such term is defined in the Restated Articles;

(b) such time after the restrictions contemplated by Subsection 2.11 have lapsed when as Rule 144 or another similar exemption under the Securities Act is available for the sale of all of such Holder's shares without limitation during a three-month period without registration; and

(c) the third anniversary of the IPO.

3. Information and Observer Rights.

3.1 Delivery of Financial Statements. The Company shall deliver to each Major Investor, provided that the Board of Directors has not reasonably determined that such Major Investor is a competitor of the Company, provided further that neither Foresite, Fidelity Jennison nor New Leaf may be determined to be a competitor of the Company in any event for any purposes hereunder:

(a) as soon as practicable, but in any event within one hundred twenty (120) days after the end of each fiscal year of the Company (i) a balance sheet as of the end of such year, (ii) statements of income and of cash flows for such year, and (iii) a statement of shareholders' equity as of the end of such year, all such financial statements audited and certified by independent public accountants of nationally recognized standing selected by the Company;

(b) as soon as practicable, but in any event within forty five (45) days after the end of each of the first three (3) quarters of each fiscal year of the Company, unaudited statements of income and cash flows for such fiscal quarter, and an unaudited balance sheet as of the end of such fiscal quarter, all prepared in accordance with GAAP (except that such financial statements may (i) be subject to normal year-end audit adjustments; and (ii) not contain all notes thereto that may be required in accordance with GAAP);

(c) as soon as practicable, but in any event thirty (30) days before the end of each fiscal year, a budget and business plan for the next fiscal year (collectively, the "**Budget**"), prepared on a monthly basis, including balance sheets, income statements, and statements of cash flow for such months and, promptly after prepared, any other budgets or revised budgets prepared by the Company;

(d) of the Company and its results of operation for the periods specified therein; and

(e) such other information relating to the financial condition, business, prospects, or corporate affairs of the Company as any Major Investor may from time to time reasonably request; provided, however, that the Company shall not be obligated under this Subsection 3.1 to provide information the disclosure of which would adversely affect the attorney-client privilege between the Company and its counsel.

In addition, for so long as each of Foresite and Fidelity, respectively, remains a Major Investor and is bound by confidentiality obligations to the Company, the Company shall deliver to such Major Investor copies of all presentations, meeting agendas, notices, minutes, consents and other materials that it provides to the Company's Board of Directors within two (2) business days of and in the same manner that such materials are provided to the Board of Directors, unless the Company reasonably determines that such disclosure would adversely affect the attorney-client privilege between the Company and its counsel. Notwithstanding the foregoing, the

Company shall not be obligated to provide the information referenced in the immediately preceding sentence to Foresite at any time that Foresite has the right to exclusively designate the Series B Designee (as such term is defined in the Voting Agreement) to the Company's Board of Directors.

If, for any period, the Company has any subsidiary whose accounts are consolidated with those of the Company, then in respect of such period the financial statements delivered pursuant to the foregoing sections shall be the consolidated and consolidating financial statements of the Company and all such consolidated subsidiaries.

Notwithstanding anything else in this Subsection 3.1 to the contrary, the Company may cease providing the information set forth in this Subsection 3.1 during the period starting with the date sixty (60) days before the Company's good-faith estimate of the date of filing of a registration statement if it reasonably concludes it must do so to comply with the SEC rules applicable to such registration statement and related offering; provided that the Company's covenants under this Subsection 3.1 shall be reinstated at such time as the Company is no longer actively employing its commercially reasonable efforts to cause such registration statement to become effective.

3.2 Inspection. The Company shall permit each Major Investor (provided that the Board of Directors has not reasonably determined that such Major Investor is a competitor of the Company, and provided further that neither Foresite, Fidelity, Jennison nor New Leaf may be determined to be a competitor of the Company in any event for any purposes hereunder), at such Major Investor's expense, to visit and inspect the Company's properties; examine its books of account and records; and discuss the Company's affairs, finances, and accounts with its officers, during normal business hours of the Company as may be reasonably requested by the Major Investor; provided, however, that the Company shall not be obligated pursuant to this Subsection 3.2 to provide access to any information the disclosure of which would adversely affect the attorney-client privilege between the Company and its counsel.

3.3 Termination of Information Rights. The covenants set forth in Subsection 3.1 and Subsection 3.2 shall terminate and be of no further force or effect (i) immediately before the consummation of the IPO, (ii) when the Company first becomes subject to the periodic reporting requirements of Section 12(g) or 15(d) of the Exchange Act, or (iii) upon a Deemed Liquidation Event, as such term is defined in the Restated Articles, whichever event occurs first.

3.4 Confidentiality. Each Investor agrees that such Investor will keep confidential and will not disclose, divulge, or use for any purpose (other than to monitor its investment in the Company) any confidential information obtained from the Company pursuant to the terms of this Agreement (including notice of the Company's intention to file a registration statement), unless such confidential information (a) is known or becomes known to the public in general (other than as a result of a breach of this Subsection 3.5 by such Investor), (b) is or has been independently developed or conceived by the Investor without use of the Company's confidential information, or (c) is or has been made known or disclosed to the Investor by a third party without a breach of any obligation of confidentiality such third party may have to the Company; provided, however, that an Investor may disclose confidential information (i) to its attorneys, accountants, consultants, and other professionals to the extent necessary to obtain their

services in connection with monitoring its investment in the Company; (ii) to any prospective purchaser of any Registrable Securities from such Investor, if such prospective purchaser agrees to be bound by the provisions of this Subsection 3.5; (iii) to any existing Affiliate, partner, member, shareholder, or wholly owned subsidiary of such Investor in the ordinary course of business, provided that such Investor informs such Person that such information is confidential and directs such Person to maintain the confidentiality of such information; or (iv) as may otherwise be required by law, provided that the Investor promptly notifies the Company of such disclosure and takes reasonable steps to minimize the extent of any such required disclosure.

4. Rights to Future Share Issuances.

4.1 Right of First Offer. Subject to the terms and conditions of this Subsection 4.1 and applicable securities laws, if the Company proposes to offer or sell any New Securities, the Company shall first offer such New Securities to each Major Investor. A Major Investor shall be entitled to apportion the right of first offer hereby granted to it. in such proportions as it deems appropriate, among (i) itself and (ii) its Affiliates; provided that each such Affiliate (x) is not a competitor (provided that neither Foresite, Fidelity nor Jennison may be determined to be a competitor of the Company in any event for any purpose hereunder) or FOIA Party, unless such party's purchase of New Securities is otherwise consented to by the Board of Directors and (y) agrees to enter into this Agreement and the Voting Agreement (as defined in the Subscription Agreement), as an "**Investor**" under each such agreement (provided that any competitor or FOIA Party shall not be entitled to any rights as a Major Investor under Subsections 3.1, 3.2 and 4.1 hereof, and provided further that neither Foresite nor any of its Affiliates, Fidelity nor Jennison may be determined to be a competitor of the Company in any event for any purposes hereunder).

(a) The Company shall give notice (the "**Offer Notice**") to each Major Investor, stating (i) its bona fide intention to offer such New Securities, (ii) the number of such New Securities to be offered, and (iii) the price and terms, if any, upon which it proposes to offer such New Securities.

(b) By notification to the Company within twenty (20) days after the Offer Notice is given, each Major Investor may elect to purchase or otherwise acquire, at the price and on the terms specified in the Offer Notice, up to that portion of such New Securities which equals the proportion that the Ordinary Shares then held by such Major Investor (including all Ordinary Shares then issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of the Series B Preferred Shares and any other Derivative Securities then held by such Major Investor) bears to the total Ordinary Shares of the Company then outstanding (assuming full conversion and/or exercise, as applicable, of all Series B Preferred Shares and other Derivative Securities). At the expiration of such twenty (20) day period, the Company shall promptly notify each Major Investor that elects to purchase or acquire all the shares available to it (each, a "**Fully Exercising Investor**") of any other Major Investor's failure to do likewise. During the ten (10) day period commencing after the Company has given such notice, each Fully Exercising Investor may, by giving notice to the Company, elect to purchase or acquire, in addition to the number of shares specified above, up to that portion of the New Securities for which Major Investors were entitled to subscribe but that were not subscribed for by the Major Investors which is equal to the proportion that the Ordinary Shares issued and held,

or issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of all Series B Preferred Shares and any other Derivative Securities then held, by such Fully Exercising Investor bears to the Ordinary Shares issued and held, or issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of the Series B Preferred Shares and any other Derivative Securities then held, by all Fully Exercising Investors who wish to purchase such unsubscribed shares. The closing of any sale pursuant to this Subsection 4.1(b) shall occur within the later of one hundred and twenty (120) days of the date that the Offer Notice is given and the date of initial sale of New Securities pursuant to Subsection 4.1(c).

(c) If all New Securities referred to in the Offer Notice are not elected to be purchased or acquired as provided in Subsection 4.1(b), the Company may, during the ninety (90) day period following the expiration of the periods provided in Subsection 4.1(b), offer and sell the remaining unsubscribed portion of such New Securities to any Person or Persons at a price not less than, and upon terms no more favorable to the offeree than, those specified in the Offer Notice. If the Company does not enter into an agreement for the sale of the New Securities within such period, or if such agreement is not consummated within thirty (30) days of the execution thereof, the right provided hereunder shall be deemed to be revived and such New Securities shall not be offered unless first reoffered to the Major Investors in accordance with this Subsection 4.1.

(d) The right of first offer in this Subsection 4.1 shall not be applicable to (i) Exempted Securities (as defined in the Company's Certificate of Incorporation); and (ii) Ordinary Shares issued in the IPO.

4.2 Termination. The covenants set forth in Subsection 4.1 shall terminate and be of no further force or effect (i) immediately before the consummation of the IPO, (ii) when the Company first becomes subject to the periodic reporting requirements of Section 12(g) or 15(d) of the Exchange Act, or (iii) upon a Deemed Liquidation Event, as such term is defined in the Restated Articles, whichever event occurs first and, as to each Major Investor, in accordance with Subsection 4.1(e).

5. Additional Covenants.

5.1 Insurance. The Company shall use its commercially reasonable efforts to obtain, within ninety (90) days of the date hereof, from financially sound and reputable insurers Directors and Officers liability insurance in an amount and on terms and conditions satisfactory to the Board of Directors, and will use commercially reasonable efforts to cause such insurance to be maintained until such time as the Board of Directors determines that such insurance should be discontinued. Such insurance shall not be cancelable by the Company without prior approval by the Board of Directors.

5.2 Board Matters. Unless otherwise determined by the vote of a majority of the directors then in office, the Board of Directors shall meet at least quarterly in accordance with an agreed-upon schedule. The Company shall reimburse the non-employee directors for all reasonable out-of-pocket travel expenses incurred (consistent with the Company's travel policy) in connection with attending meetings of the Board of Directors.

5.3 Successor Indemnification. If the Company or any of its successors or assignees consolidates with or merges into any other Person and is not the continuing or surviving corporation or entity of such consolidation or merger, then to the extent necessary, proper provision shall be made so that the successors and assignees of the Company assume the obligations of the Company with respect to indemnification of members of the Board of Directors as in effect immediately before such transaction, whether such obligations are contained in the Restated Articles, or elsewhere, as the case may be.

5.4 U.S. Tax Matters.

Immediately after the Completion, to the Company's knowledge (after consultation with its tax advisors), neither the Company nor any subsidiary of the Company shall be a "Controlled Foreign Corporation" (a "**CFC**") as defined in the U.S. Internal Revenue Code of 1986, as amended (or any successor thereto) (the "**Code**"). The Company shall make due inquiry with its tax advisors on at least an annual basis regarding the Company's status as a CFC and, if it is determined that the Company is or may be a CFC, regarding whether any portion of the Company's income is "Subpart F Income" (as defined in Section 952 of the Code). No later than sixty (60) days following the end of each taxable year of the Company, the Company shall provide to the Investors the Company's capitalization table as of the end of the last day of such taxable year. In addition, the Company shall provide the Investors with reasonable access to such other Company information as may be necessary for the Investors to determine the Company's status as a CFC and to determine whether any Investor is required to report its pro rata portion of the Company's "Subpart F Income" on its United States federal income tax return, or to allow the Investors to otherwise comply with applicable United States federal income tax laws. In the event that the Company is determined by its Company's tax advisors, or by counsel or accountants for any Investor, to be a CFC, the Company agrees to use commercially reasonable efforts (consistent with the Company's overall business objectives and strategies) to (i) avoid generating Subpart F Income; and (ii) annually make dividend distributions to each Investor, to the extent permitted by law and subject to available cash, in a per share amount calculated by reference to fifty percent (50%) of any income of the Company that would have been deemed distributed per share to the Investors pursuant to Section 951(a) of the Code.

After consultation with its tax advisors, the Company does not believe that it or any of its subsidiaries is currently a "passive foreign investment company" within the meaning of Section 1297 of the Code ("**PFIC**"). The Company shall use commercially reasonable efforts to avoid being a PFIC within the meaning of Section 1297 of the Code, taking into account the Company's overall business objectives and strategies. In connection with any "Qualified Electing Fund" election made by any Investor (or its beneficial owners) pursuant to Section 1295 of the Code or any "Protective Statement" filed by any Investor (or its beneficial owners) pursuant to U.S. Treasury Regulation Section 1.1295-3, as amended (or any successor thereto), the Company shall provide an annual information statement to such Investor, as required by the applicable Treasury Regulations in form and substance as soon as reasonably practicable following the end of each taxable year of such Investor (but in no event later than ninety (90) days following the end of each such taxable year), and shall provide such Investor with access to such other Company information as may be required for purposes of filing United States federal income tax returns of the Investors (or their beneficial owners) in connection with such "Qualified Electing Fund" election or "Protective Statement". In the event that any Investor (or

any of its beneficial owners) has made a "Qualified Electing Fund" election and must include in its gross income for a particular taxable year its pro rata share of the Company's (or any Company subsidiary's) earnings and profits pursuant to Section 1293 of the Code, as amended (or any successor thereto), the Company agrees to make a dividend distribution to such Investor (no later than ninety (90) days following the end of such Investor's taxable year or, if later, sixty (60) days after the Company is informed by such Investor that it (or any of its beneficial owners) has been required to recognize such an income inclusion) in an amount equal to fifty percent (50%) of the amount that would be included by such Investor (or its beneficial owners) if such person were a "United States person" as such term is defined in Section 7701(a)(30) of the Code and had such person made a valid and timely "Qualified Electing Fund" election which was applicable to such taxable year.

The Company shall take such actions, including making an election to be treated as a corporation or refraining from making an election to be treated as a partnership, as may be required to ensure that at all times the Company is treated as a corporation for United States federal income tax purposes.

The Company shall make due inquiry with its tax advisors (and shall cooperate with the Investors' tax advisors with respect to such inquiry) on at least an annual basis regarding whether any Investor's (or any of its beneficial owners') direct or indirect interest in the Company is subject to the reporting requirements of either or both of Sections 6038 and 6038B of the Code (and the Company shall duly inform the Investors of the results of such determination), and in the event that any Investor's (or any of its beneficial owners') direct or indirect interest in Company is determined by the Company's tax advisors or such Investor's tax advisors to be subject to the reporting requirements of either or both of Sections 6038 and 6038B of the Code, the Company agrees, upon a request from such Investor, to provide such information to such Investor as may be necessary to fulfil such Investor's (or its beneficial owners') obligations thereunder.

The Company further covenants and agrees that to the extent it has any U.S. tax reporting compliance obligations, it shall engage, within ninety (90) days following the date upon which the facts and circumstances triggering such tax compliance reporting obligations arise, with a reputable U.S. tax advisory firm to assist the Company with such U.S. tax reporting and compliance obligations.

5.5 FCPA. The Company represents that it shall not (and shall not permit any of its subsidiaries or affiliates or any of its or their respective directors, officers, managers, employees, independent contractors, representatives or agents to) promise, authorize or make any payment to, or otherwise contribute any item of value to, directly or indirectly, to any third party, including any Non-U.S. Official (as (as such term is defined in the U.S. Foreign Corrupt Practices Act of 1977, as amended (the "FCPA")), in each case, in violation of the FCPA, the U.K. Bribery Act, or any other applicable anti-bribery or anti-corruption law. The Company further represents that it shall (and shall cause each of its subsidiaries and affiliates to) cease all of its or their respective activities, as well as remediate any actions taken by the Company, its subsidiaries or affiliates, or any of their respective directors, officers, managers, employees, independent contractors, representatives or agents in violation of the FCPA, the U.K. Bribery Act, or any other applicable anti-bribery or anti-corruption law. The Company further represents

that it shall (and shall cause each of its subsidiaries and affiliates to) maintain systems of internal controls (including, but not limited to, accounting systems, purchasing systems and billing systems) to ensure compliance with the FCPA, the U.K. Bribery Act, or any other applicable anti-bribery or anti-corruption law. Upon request, the Company agrees to provide responsive information and/or certifications concerning its compliance with applicable anti-corruption laws. The Company shall promptly notify each Investor if the Company becomes aware of any Enforcement Action (as defined in the Subscription Agreement). The Company shall, and shall cause any direct or indirect subsidiary or entity controlled by it, whether now in existence or formed in the future, to comply with the FCPA. The Company shall use its best efforts to cause any direct or indirect subsidiary, whether now in existence or formed in the future, to comply in all material respects with all applicable laws.

5.6 Termination of Covenants. The covenants set forth in this Section 5, shall terminate and be of no further force or effect (i) immediately before the consummation of the IPO, or (ii) when the Company first becomes subject to the periodic reporting requirements of Section 12(g) or 15(d) of the Exchange Act, or (iii) upon a Deemed Liquidation Event, as such term is defined in the Restated Articles, whichever event occurs first.

6. Miscellaneous.

6.1 Successors and Assigns. The rights under this Agreement may be assigned (but only with all related obligations) by a Holder to a transferee of Registrable Securities that (i) is an Affiliate of a Holder; (ii) is a Holder's Immediate Family Member or trust for the benefit of an individual Holder or one or more of such Holder's Immediate Family Members; or (iii) after such transfer, holds at least 100,000 shares of Registrable Securities (subject to appropriate adjustment for share splits, share dividends, combinations, and other recapitalizations); provided, however, that (x) the Company is, within a reasonable time after such transfer, furnished with written notice of the name and address of such transferee and the Registrable Securities with respect to which such rights are being transferred; and (y) such transferee agrees in a written instrument delivered to the Company to be bound by and subject to the terms and conditions of this Agreement, including the provisions of Subsection 2.11. For the purposes of determining the number of shares of Registrable Securities held by a transferee, the holdings of a transferee (1) that is an Affiliate or shareholder of a Holder; (2) who is a Holder's Immediate Family Member; or (3) that is a trust for the benefit of an individual Holder or such Holder's Immediate Family Member shall be aggregated together and with those of the transferring Holder; provided further that all transferees who would not qualify individually for assignment of rights shall have a single attorney-in-fact for the purpose of exercising any rights, receiving notices, or taking any action under this Agreement. The terms and conditions of this Agreement inure to the benefit of and are binding upon the respective successors and permitted assignees of the parties. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and permitted assignees any rights, remedies, obligations or liabilities under or by reason of this Agreement, except as expressly provided herein.

6.2 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of Singapore.

6.3 Counterparts. This Agreement may be executed in two (2) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, e.g., www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

6.4 Titles and Subtitles. The titles and subtitles used in this Agreement are for convenience only and are not to be considered in construing or interpreting this Agreement.

6.5 Notices. All notices and other communications given or made pursuant to this Agreement shall be in writing and shall be deemed effectively given upon the earlier of actual receipt or (i) personal delivery to the party to be notified; (ii) when sent, if sent by electronic mail during the recipient's normal business hours, and if not sent during normal business hours, then on the recipient's next business day; (iii) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid; or (iv) one (1) business day after the business day of deposit with a nationally recognized overnight courier, freight prepaid, specifying next-day delivery, with written verification of receipt. All communications shall be sent to the respective parties at their addresses as set forth on Schedule A hereto, or to the principal office of the Company and to the attention of the Chief Executive Officer, in the case of the Company, or to such email address, or address as subsequently modified by written notice given in accordance with this Subsection 6.5. If notice is given to the Company, a copy shall also be sent to Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., One Financial Center, Boston, MA 02111, Attn: William C. Hicks, Esq. and if notice is given to Investors, a copy shall also be given to Gunderson Dettmer Stough Villeneuve Franklin & Hachigian, LLP, Attn: Brian Patterson.

6.6 Amendments and Waivers. Any term of this Agreement may be amended and the observance of any term of this Agreement may be waived (either generally or in a particular instance, and either retroactively or prospectively) only with the written consent of the Company and the holders of a majority of the Registrable Securities then outstanding; provided that the Company may in its sole discretion waive compliance with Subsection 2.12(c) (and the Company's failure to object promptly in writing after notification of a proposed assignment allegedly in violation of Subsection 2.12(c) shall be deemed to be a waiver); and provided further that any provision hereof may be waived by any waiving party on such party's own behalf, without the consent of any other party. Notwithstanding the foregoing, (i) this Agreement may not be amended or terminated and the observance of any term hereof may not be waived with respect to any Investor without the written consent of such Investor, unless such amendment, termination, or waiver applies to all Investors in the same fashion (it being agreed that a waiver of the provisions of Section 4 with respect to a particular transaction shall be deemed to apply to all Investors in the same fashion if such waiver does so by its terms, notwithstanding the fact that certain Investors may nonetheless, by agreement with the Company, purchase securities in such transaction); provided, however, that if Investors waiving the provisions of Section 4 with respect to a particular transaction purchase securities in such transaction, any non-waiving Investors shall have the right to purchase a pro rata portion (relative to the amount of such securities purchased by the waiving Investors) of such securities on the same terms and conditions), (ii) no waiver or amendment of Subsections 2.11 and 3.1 or this clause (ii) that is

adverse to Fidelity shall be effective as to Fidelity without the prior written consent of Fidelity, so long as Fidelity is a Major Investor, (iii) no waiver or amendment of Subsections 2.11 and 3.1 or this clause (iii) that is adverse to Foresite shall be effective as to Foresite without the prior written consent of Foresite, so long as Foresite is a Major Investor, (iv) no waiver or amendment of Subsections 2.11 and 3.1 or this clause (iv) that is adverse to Jennison shall be effective as to Jennison without the prior written consent of Jennison, so long as Jennison is a Major Investor, (v) no waiver or amendment of Subsection 3.1 or this clause (v) that is adverse to New Leaf shall be effective as to New Leaf, so long as New Leaf is a Major Investor and (vi) the definition of "Major Investor" may not be changed without the consent of (a) Fidelity for so long as Fidelity is a Major Investor and (b) Jennison for so long as Jennison is a Major Investor. The Company shall give prompt notice of any amendment or termination hereof or waiver hereunder to any party hereto that did not consent in writing to such amendment, termination, or waiver. Any amendment, termination, or waiver effected in accordance with this Subsection 6.6 shall be binding on all parties hereto, regardless of whether any such party has consented thereto. No waivers of or exceptions to any term, condition, or provision of this Agreement, in any one or more instances, shall be deemed to be or construed as a further or continuing waiver of any such term, condition, or provision.

6.7 Severability. In case any one or more of the provisions contained in this Agreement is for any reason held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision of this Agreement, and such invalid, illegal, or unenforceable provision shall be reformed and construed so that it will be valid, legal, and enforceable to the maximum extent permitted by law.

6.8 Aggregation of Shares. All shares of Registrable Securities held or acquired by Affiliates shall be aggregated together for the purpose of determining the availability of any rights under this Agreement and such Affiliated persons may apportion such rights as among themselves in any manner they deem appropriate.

6.9 Additional Investors. Notwithstanding anything to the contrary contained herein, if the Company issues additional shares of the Company's Series B Preferred Shares after the date hereof, any purchaser of such Series B Preferred Shares may become a party to this Agreement by executing and delivering an additional counterpart signature page to this Agreement, and thereafter shall be deemed an "Investor" for all purposes hereunder. No action or consent by the Investors shall be required for such joinder to this Agreement by such additional Investor, so long as such additional Investor has agreed in writing to be bound by all of the obligations as an "Investor" hereunder.

6.10 Entire Agreement. This Agreement (including any Schedules hereto) constitutes the full and entire understanding and agreement among the parties with respect to the subject matter hereof, and any other written or oral agreement relating to the subject matter hereof existing between the parties is expressly canceled. Upon the effectiveness of this Agreement and the other Voting Agreement (as defined in the Subscription Agreement), the Shareholders Agreement shall be deemed superseded and replaced in its entirety by this Agreement, and shall be of no further force or effect.

6.11 Dispute Resolution. Any dispute, controversy or claim arising out of or in connection with this Agreement, including any question regarding its existence, validity, interpretation, performance, breach or termination, shall be referred to and finally resolved by binding arbitration in Singapore in accordance with the Arbitration Rules of the Singapore International Arbitration Centre (the SIAC Rules) for the time being in force, which rules are deemed to be incorporated by reference. The place of arbitration shall be Singapore. The number of arbitrators shall be one (1), whose appointment shall be in accordance with the SIAC Rules. The award shall be final and binding on the parties, and judgment upon any award may be entered and enforced in any court having jurisdiction.

Each Investor irrevocably agrees that, in the event of multiple disputes involving the same or substantially the same facts or issues between the Company and the Investors, the Company may, in order to facilitate the comprehensive resolution of related disputes, apply to the arbitrator first appointed to hear any such dispute to consolidate the arbitration with any other arbitration or proposed arbitration involving the Investor and relating to this Agreement. Such arbitrator shall not consolidate such arbitrations unless it determines that (a) there are issues of fact or law common to the arbitrations in questions so that a consolidated proceeding would be more efficient than separate proceedings, and (b) no party would be prejudiced as a result of such consolidation through undue delay or otherwise.

6.12 Delays or Omissions. No delay or omission to exercise any right, power, or remedy accruing to any party under this Agreement, upon any breach or default of any other party under this Agreement, shall impair any such right, power, or remedy of such nonbreaching or nondefaulting party, nor shall it be construed to be a waiver of or acquiescence to any such breach or default, or to any similar breach or default thereafter occurring, nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. All remedies, whether under this Agreement or by law or otherwise afforded to any party, shall be cumulative and not alternative.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

WAVE LIFE SCIENCES PTE. LTD.

By: /s/ Paul B. Bolno, M.D.

Name: Paul B. Bolno, M.D.

Title: President and Chief Executive Officer

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

Foresite Capital Fund III, L.P.

By: Foresite Capital Management III, LLC its General Partner

By: /s/ Dennis D. Ryan

Name: Dennis D. Ryan

Title: Chief Financial Officer

Dated: 8-11-15

E-Mail Address

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

Fidelity Select Portfolios: Biotechnology Portfolio

By: /s/ Joseph Zambello

Name: Joseph Zambello

Title: Deputy Treasurer

Dated:

E-Mail Address

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

Fidelity Advisor Series VII: Fidelity Advisor Biotechnology Fund

By: /s/ Joseph Zambello

Name: Joseph Zambello

Title: Deputy Treasurer

Dated:

E-Mail Address

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

RA CAPITAL HEALTHCARE FUND, L.P.

By: RA Capital Management, LLC
Its: General Partner

By: /s/ Peter Kolchinsky

Name: Peter Kolchinsky

Title: Authorized Signatory

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

BLACKWELL PARTNERS LLC – SERIES A

By: /s/ Eric M. Koehrsen

Eric M. Koehrsen
Investment Manager
DUMAC, Inc.

Name: Authorized Agent

Title: Authorized Signatory

By: /s/ Jannine M. Lall

Jannine M. Lall
Assistant Treasurer
DUMAC, Inc.

Name: Authorized Agent

Title: Authorized Signatory

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

New Leaf Growth Fund I, L.P.

By: New Leaf Growth Associates I, L.P.
Its: General Partner

By: New Leaf Venture Management III, L.L.C.
Its: General Partner

By: /s/ Craig L. Slutzkin

Name: Craig L. Slutzkin

Title: Chief Financial Officer

Dated: 8-12-15

E-Mail Address

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

Redmile Capital Fund, LP

By: /s/ Jeremy Green

Name: Jeremy Green

Title: Managing Member of the General Partner and the Investment Manager

Dated: 8/12/2015

E-Mail Address

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

Redmile Capital Offshore Fund, Ltd.

By: /s/ Jeremy Green

Name: Jeremy Green

Title: Managing Member of the Investment Manager

Dated: 8/12/2015

E-Mail Address

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

Redmile Special Opportunities Fund, Ltd.

By: /s/ Jeremy Green

Name: Jeremy Green

Title: Managing Member of the Investment Manager

Dated: 8/12/2015

E-Mail Address

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

Redmile Capital Offshore Fund II, Ltd.

By: /s/ Jeremy Green

Name: Jeremy Green

Title: Managing Member of the Investment Manager

Dated: 8/12/2015

E-Mail Address

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

Redmile Biotechnologies Investments I AF, LP

By: /s/ Jeremy Green

Name: Jeremy Green

Title: Managing Member of the Mngt. Co./Investment Manager

Dated: 8/12/2015

E-Mail Address

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

Cormorant Global Healthcare Master Fund, LP

By: /s/ Bihua Chen

Name: Bihua Chen

Title: Managing Member of the General Partner

Dated: August 12, 2015

E-Mail Address

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

Clough Investment Partners I, L.P.

By: /s/ Daniel J. Gillis

Name: Daniel J. Gillis

Title: Chief Compliance Officer

Dated: 8/12/15

E-mail Address

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

Clough Investment Partners II, L.P.

By: /s/ Daniel J. Gillis

Name: Daniel J. Gillis

Title: Chief Compliance Officer

Dated: 8/12/15

E-Mail Address

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

Leerink Holdings LLC

By: /s/ Timothy A.G. Gerhold

Name: Timothy A.G. Gerhold

Title: General Counsel

Dated: 8/12/2015

E-Mail Address
Copy to:

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

Leerink Swann Co-Investment Fund, LLC

By: /s/ Jeffrey A. Leerink

Name: Jeffrey A. Leerink

Title: Manager

Dated: 8/12/2015

E-Mail Address

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

Jennison Global Healthcare Master Fund, Ltd.

By: Jennison Associates LLC, as the Investment Manager of Jennison Global Healthcare Master Fund, Ltd.

By: /s/ David Chan

Name: David Chan

Title: Managing Director of Jennison Associates LLC

Dated: August 12, 2015

E-Mail Address

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

SNBL USA, Ltd.

By: /s/ Ryoichi Nagata

Name: Ryoichi Nagata

Title: Chairman

Dated:

E-Mail Address

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

Shin Nippon Biomedical Laboratories, Ltd.

By: /s/ Ryoichi Nagata

Name: Ryoichi Nagata

Title: Chairman and CEO

Dated:

E-Mail Address

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

Kagoshima Shinsangyo Sousei Investment Limited Partnership

By: /s/ Masaharu Tanaka

Name: Masaharu Tanaka

Title:

Dated:

E-Mail Address

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

Gregory L. Verdine
Printed Name of Individual

/s/ Gregory L. Verdine
Signature of Individual

Dated: _____

_____
E-Mail Address

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

Takeshi Wada
Printed Name of Individual

/s/ Takeshi Wada
Signature of Individual

Dated: Aug. 13, 2015

E-mail Address

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

INVESTORS:

Paul B. Bolno, M.D.
Printed Name of Individual

/s/ Paul B. Bolno, M.D.
Signature of Individual

Dated: _____

_____
E-Mail Address

SIGNATURE PAGE TO INVESTORS' RIGHTS AGREEMENT

SCHEDULE A

Investors

Foresite Capital Fund III, L.P.
101 California Street, Suite 4100
San Francisco, CA 94111
Attention: Dennis D. Ryan
Email:

Fidelity Select Portfolios: Biotechnology Portfolio
c/o Brown Brothers Harriman & Co.
525 Washington Blvd
Jersey City NJ 07310
Attn: Michael Lerman 15th Floor
Corporate Actions
Email:

Fidelity Advisor Series VII: Fidelity Advisor Biotechnology Fund
c/o State Street Bank & Trust
PO Box 5756
Boston, MA 02206
Attn: Bangle & Co fbo Fidelity Advisor Series VII: Fidelity Advisor Biotechnology Fund
Email:

RA Capital Healthcare Fund, L.P.
20 Park Plaza, Suite 1200
Boston, MA 02116
(617) 778-2500

Blackwell Partners LLC
20 Park Plaza, Suite 1200
Boston, MA 02116

New Leaf Growth Fund I, L.P.
7 Times Square, Suite 3502
New York, NY 10036
Attn: Craig L. Slutzkin
Email:

Redmile Fund, LP
c/o Redmile Group, LLC
One Letterman Drive, Bld. D, Suite D3-300
San Francisco, CA 94129

Redmile Capital Offshore Fund, Ltd.
c/o Redmile Group, LLC
One Letterman Drive, Bld. D, Suite D3-300
San Francisco, CA 94129

Redmile Special Opportunities Fund, Ltd.
c/o Redmile Group, LLC
One Letterman Drive, Bld. D, Suite D3-300
San Francisco, CA 94129

Redmile Capital Offshore Fund II, Ltd.
c/o Redmile Group, LLC
One Letterman Drive, Bld. D, Suite D3-300
San Francisco, CA 94129

Redmile Biotechnologies Investments I AF, LP
c/o Redmile Group, LLC
One Letterman Drive, Bld. D, Suite D3-300
San Francisco, CA 94129

Cormorant Global Healthcare Master Fund, LP
200 Clarendon Street, 52nd Floor
Boston, MA 02116

Clough Investment Partners II, L.P.
One Post Office Square, 40th Floor
Boston, MA 02109

Leerink Holdings LLC
One Federal Street, 37th Floor
Boston, MA 02110

Leerink Swann Co-Investment Fund, LLC
One Federal Street, 37th Floor
Boston, MA 02110

Jennison Global Healthcare Master Fund, Ltd.
c/o Jennison Associates LLC
466 Lexington Avenue
New York, New York 10017

Email:

SNBL USA, Ltd.
6605 Merrill Creek Parkway
Everett, WA 98203

Shin Nippon Biomedical Laboratories Ltd.
6605 Merrill Creek Parkway
Everett, WA 98203

Kagoshima Shinsangyo Sousei Investment Limited Partnership
6-1-20 Nanei
Kagoshim City, Kagoshima
821-0122 Japan
099-260-3311

Gregory L. Verdine
500 Atlantic Avenue, 18P
Boston, MA 02210

Takeshi Wada
4-11-42-301 Asahi Cho
Kashiwa, Chiba 277-0852, Japan
Email:

Paul B. Bolno
113 W. Chestnut Hill Avenue
Philadelphia, PA 19118
Email:

Exhibit 10.1

WAVE LIFE SCIENCES PTE. LTD.
2014 EQUITY INCENTIVE PLAN

1. Purpose; Eligibility.

1.1 General Purpose. The name of this plan is the Wave Life Sciences Pte. Ltd. 2014 Equity Incentive Plan (the "Plan"). The purposes of the Plan are to (i) provide eligible Employees, Consultants, and Directors with the opportunity to acquire a proprietary interest, or otherwise increase their proprietary interest, in the Company as an incentive for them to remain in the service of Wave Life Sciences Pte. Ltd., a corporation formed in Singapore (the "Company"), and any Affiliate; and (ii) promote the success of the Company's business.

1.2 Eligible Award Recipients. The persons eligible to receive Awards are the Employees, Consultants, and Directors of the Company and its Affiliates.

1.3 Available Awards. Awards that may be granted under the Plan include: (a) Incentive Share Options; (b) Non-qualified Share Options; (c) Share Appreciation Rights; and (d) Restricted Awards.

2. Definitions.

"Affiliate" means a corporation or other entity that, directly or through one or more intermediaries, controls, is controlled by or is under common control with, the Company.

"Applicable Laws" means the requirements related to or implicated by the administration of the Plan under (i) applicable laws of the Republic of Singapore, including but not limited to, the Singaporean Equity Remuneration Incentive Scheme and the Income Tax Act of Singapore; (ii) applicable laws of the United States, including but not limited to, United States federal and state securities laws and the Code; (iii) applicable laws of Japan, including but not limited to, the Financial Instruments and Exchange Act of Japan; (iv) any stock exchange or quotation system on which the Ordinary Shares are listed or quoted; and (v) the applicable laws of any foreign country or jurisdiction where Awards are granted under the Plan.

"Award" means any right granted under the Plan, including an Incentive Share Option, a Non-qualified Share Option, a Share Appreciation Right, or a Restricted Award.

"Award Agreement" means a written agreement, contract, certificate or other instrument or document evidencing the terms and conditions of an individual Award granted under the Plan which may, in the discretion of the Company, be transmitted electronically to any Participant. Each Award Agreement shall be subject to the terms and conditions of the Plan.

"Board" means the Board of Directors of the Company, as constituted at any time.

"Cause" means:

With respect to any Employee or Consultant: (a) if the Employee or Consultant is a party to an employment or service agreement with the Company or its Affiliates and such agreement provides for a definition of Cause, the definition contained therein; or (b) if no such agreement exists, or if such agreement does not define Cause: (i) the commission of, or plea of guilty or no contest to, a felony or a

crime involving fraud, embezzlement or any other act of moral turpitude or the commission of any other act involving willful malfeasance or material fiduciary breach with respect to the Company or an Affiliate; (ii) conduct that results in or is reasonably likely to result in harm to the reputation or business of the Company or any of its Affiliates; (iii) gross negligence or willful misconduct with respect to the Company or an Affiliate; (iv) material breach of any employment, consulting, advisory, nondisclosure, non-solicitation, non-competition or similar agreement with the Company or its Affiliates; or (v) material violation of state or federal securities laws.

With respect to any Director, a determination by a majority of the disinterested Board members that the Director has engaged in any of the following: (a) gross misconduct or neglect; (b) false or fraudulent misrepresentation inducing the Director's appointment; or (c) willful conversion of corporate funds.

The Committee, in its absolute discretion, shall determine the effect of all matters and questions relating to whether a Participant has been discharged for Cause.

"Code" means the U.S. Internal Revenue Code of 1986, as it may be amended from time to time. Any reference to a section of the Code shall be deemed to include a reference to any regulations promulgated thereunder.

"Committee" means a committee of one or more members of the Board appointed by the Board to administer the Plan in accordance with ***Section* 3.3**.

"Company" means Wave Life Sciences Pte. Ltd., a corporation formed in Singapore, and any successor thereto.

"Consultant" means any individual who is engaged by the Company or any Affiliate to render consulting or advisory services.

"Continuous Service" means that the Participant's service with the Company or an Affiliate, whether as an Employee, Consultant or Director, is not interrupted or terminated. The Participant's Continuous Service shall not be deemed to have terminated merely because of a change in the capacity in which the Participant renders service to the Company or an Affiliate as an Employee, Consultant or Director or a change in the entity for which the Participant renders such service, *provided that* there is no interruption or termination of the Participant's Continuous Service; *provided further* that if any Award is subject to Section 409A of the Code, this sentence shall only be given effect to the extent consistent with Section 409A of the Code.

"Corporate Transaction" has the meaning set forth in ***Section* 14.8**.

"Director" means a member of the Board.

"Disability" means that the Participant is unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment; *provided, however,* for purposes of determining the term of an Incentive Share Option pursuant to ***Section* 6.10** hereof, the term Disability shall have the meaning ascribed to it under Section 22(e)(3) of the Code. The determination of whether an individual has a Disability shall be determined under procedures established by the Committee. Except in situations where the Committee is determining Disability for purposes of the term

of an Incentive Share Option pursuant to ***Section* 6.10** hereof within the meaning of Section 22(e)(3) of the Code, the Committee may rely on any determination that a Participant is disabled for purposes of benefits under any long-term disability plan maintained by the Company or any Affiliate in which a Participant participates.

"Disqualifying Disposition" has the meaning set forth in ***Section* 14.8**.

"Effective Date" shall mean the date as of which this Plan is adopted by the Board.

"Employee" means any person, including an Officer or Director, employed by the Company or an Affiliate; *provided, that*, for purposes of determining eligibility to receive Incentive Share Options, an Employee shall mean an employee of the Company or a parent or subsidiary corporation within the meaning of Section 424 of the Code.

"Exchange Act" means the U.S. Securities Exchange Act of 1934, as amended.

"Fair Market Value" means, as of any date, the value of an Ordinary Share as determined below. If an Ordinary Share is listed on any established stock exchange or a national market system, including without limitation, the New York Stock Exchange or the NASDAQ Stock Market, the Fair Market Value shall be the closing price of an Ordinary Share (or if no sales were reported the closing price on the date immediately preceding such date) as quoted on such exchange or system on the day of determination, as reported in the *Wall Street Journal*. In the absence of an established market for an Ordinary Share, the Fair Market Value shall be determined in good faith by the Committee and such determination shall be conclusive and binding on all persons.

"Grant Date" means the date on which the Committee adopts a resolution, or takes other appropriate action, expressly granting an Award to a Participant that specifies the key terms and conditions of the Award or, if a later date is set forth in such resolution, then such date as is set forth in such resolution.

"Incentive Share Option" means an Option intended to qualify as an incentive stock option within the meaning of Section 422 of the Code.

"Non-Employee Director" means a Director who is a "non-employee director" within the meaning of Rule 16b-3.

"Non-qualified Share Option" means an Option that by its terms does not qualify or is not intended to qualify as an Incentive Share Option.

"Officer" means a person who is an officer of the Company within the meaning of Section 16 of the Exchange Act and the rules and regulations promulgated thereunder.

"Option" means an Incentive Share Option or a Non-qualified Share Option granted pursuant to the Plan.

"Optionholder" means a person to whom an Option is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Option.

"Option Exercise Price" means the price at which an Ordinary Share may be purchased upon the exercise of an Option.

"Ordinary Shares" means ordinary shares in the capital of the Company, or such other securities of the Company as may be designated by the Committee from time to time in substitution thereof.

"Participant" means an eligible person to whom an Award is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Award.

"Permitted Transferee" means the following if prior approval is obtained from the Committee in its sole and absolute discretion: (a) a member of the Optionholder's immediate family (child, stepchild, grandchild, parent, stepparent, grandparent, spouse, former spouse, sibling, niece, nephew, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law, including adoptive relationships), any person sharing the Optionholder's household (other than a tenant or employee), a trust in which these persons have more than 50% of the beneficial interest, a foundation in which these persons (or the Optionholder) control the management of assets; and any other entity in which these persons (or the Optionholder) own more than 50% of the voting interests; and (b) such other transferees as may be permitted by the Committee in its sole discretion.

"Plan" means Wave Life Sciences Pte. Ltd. 2014 Equity Incentive Plan, as amended and/or amended and restated from time to time.

"Restricted Award" means any Award granted pursuant to ***Section* 7.2(a)**.

"Restricted Period" has the meaning set forth in ***Section* 7.2(a)**.

"Rule 16b-3" means Rule 16b-3 promulgated under the Exchange Act or any successor to Rule 16b-3, as in effect from time to time.

"Securities Act" means the U.S. Securities Act of 1933, as amended.

"Share Appreciation Right" means the right pursuant to an Award granted under ***Section* 7.1** to receive, upon exercise, an amount payable in cash or shares equal to the number of shares subject to the Share Appreciation Right that is being exercised multiplied by the excess of (a) the Fair Market Value of an Ordinary Share on the date the Award is exercised, over (b) the exercise price specified in the Share Appreciation Right Award Agreement.

"Ten Percent Shareholder" means a person who owns (or is deemed to own pursuant to Section 424(d) of the Code) more than 10% of the total combined voting power of all classes of shares of the Company or of any of its Affiliates.

3. Administration.

3.1 Authority of Committee. The Plan shall be administered by the Committee or, in the Board's sole discretion, by the Board. Subject to the terms of the Plan, the Committee's charter and Applicable Laws, and in addition to other express powers and authorization conferred by the Plan, the Committee shall have the authority:

(a) to construe and interpret the Plan and apply its provisions;

(b) to promulgate, amend, and rescind rules and regulations relating to the administration of the Plan;

(c) to authorize any person to execute, on behalf of the Company, any instrument required to carry out the purposes of the Plan;

(d) to determine when Awards are to be granted under the Plan and the applicable Grant Date;

(e) from time to time to select, subject to the limitations set forth in this Plan, those Participants to whom Awards shall be granted;

(f) to determine the number of Ordinary Shares to be made subject to each Award;

(g) to determine whether each Option is to be an Incentive Share Option or a Non-qualified Share Option;

(h) to prescribe the terms and conditions of each Award, including, without limitation, the exercise price and medium of payment and vesting provisions, and to specify the provisions of the Award Agreement relating to such grant;

(i) to amend any outstanding Awards, including for the purpose of modifying the time or manner of vesting, or the term of any outstanding Award; *provided*, *however*, that any such amendment shall be subject to the Participant's consent if required pursuant to ***Section 13***.5

(j) to make decisions with respect to outstanding Awards that may become necessary upon a change in corporate control or an event that triggers anti-dilution adjustments;

(k) to interpret, administer, reconcile any inconsistency in, correct any defect in and/or supply any omission in the Plan and any instrument or agreement relating to, or Award granted under, the Plan;

(l) to exercise discretion to make any and all other determinations which it determines to be necessary or advisable for the administration of the Plan; and

(m) to adopt sub-plans that, when taken together with the Plan, shall constitute the Plan for those certain tax residents identified in the applicable sub-plan.

The Committee also may modify the purchase price or the exercise price of any outstanding Award, *provided that* if the modification affects a repricing, shareholder approval shall be required before the repricing is effective.

3.2 Committee Decisions Final. All decisions made by the Committee pursuant to the provisions of the Plan shall be final and binding on the Company and the Participants, unless such decisions are determined by a court having jurisdiction to be arbitrary and capricious.

3.3 Delegation. The Committee, or if no Committee has been appointed, the Board, may delegate administration of the Plan to a committee or committees of one or more members of the Board, and the

term "Committee" shall apply to any person or persons to whom such authority has been delegated. The Committee shall have the power to delegate to a subcommittee any of the administrative powers the Committee is authorized to exercise (and references in this Plan to the Board or the Committee shall thereafter be to the committee or subcommittee), subject, however, to Applicable Laws and such resolutions, not inconsistent with the provisions of the Plan, as may be adopted from time to time by the Board. The Board may abolish the Committee at any time and revest in the Board the administration of the Plan.

3.4 Indemnification. In addition to such other rights of indemnification as they may have as Directors or members of the Committee, and to the extent allowed by Applicable Laws, the Committee shall be indemnified by the Company against the reasonable expenses, including attorney's fees, actually incurred in connection with any action, suit or proceeding or in connection with any appeal therein, to which the Committee may be party by reason of any action taken or failure to act under or in connection with the Plan or any Award granted under the Plan, and against all amounts paid by the Committee in settlement thereof (*provided*, *however*, that the settlement has been approved by the Company, which approval shall not be unreasonably withheld) or paid by the Committee in satisfaction of a judgment in any such action, suit or proceeding, except in relation to matters as to which it shall be adjudged in such action, suit or proceeding that such Committee did not act in good faith and in a manner which such person reasonably believed to be in the best interests of the Company, or in the case of a criminal proceeding, had no reason to believe that the conduct complained of was unlawful; *provided*, *however*, that within 60 days after institution of any such action, suit or proceeding, such Committee shall, in writing, offer the Company the opportunity at its own expense to handle and defend such action, suit or proceeding.

4. Shares Subject to the Plan.

4.1 Subject to adjustment in accordance with ***Section* 11**, a total of 879,800 Ordinary Shares shall be available for the grant of Awards under the Plan. During the terms of the Awards, the Company shall keep available at all times the number of Ordinary Shares required to satisfy such Awards.

4.2 Ordinary Shares available for distribution under the Plan may consist, in whole or in part, of authorized and unissued shares, treasury shares or shares reacquired by the Company in any manner.

4.3 Any Ordinary Shares subject to an Award that is canceled, forfeited or expires prior to exercise or realization, either in full or in part, shall again become available for issuance under the Plan. Notwithstanding anything to the contrary contained herein, shares subject to an Award under the Plan shall not again be made available for issuance or delivery under the Plan if such shares are (a) shares tendered in payment of an Option; (b) shares delivered or withheld by the Company to satisfy any tax withholding obligation; or (c) shares covered by a share-settled Share Appreciation Right or other Awards that were not issued upon the settlement of the Award.

5. Eligibility.

5.1 Eligibility for Specific Awards. Incentive Share Options may be granted only to Employees who are tax residents of the United States and shall not include Employees who are solely Officers and Directors. Awards other than Incentive Share Options may be granted to Employees, Consultants and Directors.

5.2 Ten Percent Shareholders. A Ten Percent Shareholder shall not be granted an Incentive Share Option unless the Option Exercise Price is at least 110% of the Fair Market Value of an Ordinary Share at the Grant Date and the Option is not exercisable after the expiration of five years from the Grant Date.

6. Option Provisions. Each Option granted under the Plan shall be evidenced by an Award Agreement. Each Option so granted shall be subject to the conditions set forth in this ***Section* 6**, and to such other conditions not inconsistent with the Plan as may be reflected in the applicable Award Agreement. All Options shall be separately designated Incentive Share Options or Non-qualified Share Options at the time of grant, and, if certificates are issued, a separate certificate or certificates will be issued for Ordinary Shares purchased on exercise of each type of Option. Notwithstanding the foregoing, the Company shall have no liability to any Participant or any other person if an Option designated as an Incentive Share Option fails to qualify as such at any time or if an Option is determined to constitute "nonqualified deferred compensation" within the meaning of Section 409A of the Code and the terms of such Option do not satisfy the requirements of Section 409A of the Code. The provisions of separate Options need not be identical, but each Option shall include (through incorporation of provisions hereof by reference in the Option or otherwise) the substance of each of the following provisions:

6.1 Term. Subject to the provisions of ***Section* 5.2** regarding Ten Percent Shareholders, no Incentive Share Option shall be exercisable after the expiration of 10 years from the Grant Date. The term of a Non-qualified Share Option granted under the Plan shall be determined by the Committee; *provided, however*, no Non-qualified Share Option shall be exercisable after the expiration of 10 years from the Grant Date.

6.2 Exercise Price of An Incentive Share Option. Subject to the provisions of ***Section* 5.2** regarding Ten Percent Shareholders, the Option Exercise Price of each Incentive Share Option shall be not less than 100% of the Fair Market Value of an Ordinary Share subject to the Option on the Grant Date. Notwithstanding the foregoing, an Incentive Share Option may be granted with an Option Exercise Price lower than that set forth in the preceding sentence if such Option is granted pursuant to an assumption or substitution for another option in a manner satisfying the provisions of Section 424(a) of the Code.

6.3 Exercise Price of a Non-qualified Share Option. The Option Exercise Price of each Non-qualified Share Option shall be not less than 100% of the Fair Market Value of an Ordinary Share subject to the Option on the Grant Date. Notwithstanding the foregoing, a Non-qualified Share Option may be granted with an Option Exercise Price lower than that set forth in the preceding sentence if such Option is granted pursuant to an assumption or substitution for another option in a manner satisfying the provisions of Section 409A of the Code.

6.4 Consideration. The Option Exercise Price of an Ordinary Share acquired pursuant to an Option shall be paid, to the extent permitted by Applicable Laws, either (a) in cash or by certified or bank check at the time the Option is exercised; or (b) in the discretion of the Committee, upon such terms as the Committee shall approve, the Option Exercise Price may be paid: (i) by reduction in the number of Ordinary Shares otherwise deliverable upon exercise of such Option with a Fair Market Value equal to the aggregate Option Exercise Price at the time of exercise; (ii) in accordance with a cashless exercise program established with a securities brokerage firm, or (iii) in any other form of legal consideration that may be acceptable to the Committee.

6.5 Transferability of An Incentive Share Option. An Incentive Share Option shall not be transferable except by will or by the laws of descent and distribution and shall be exercisable during the lifetime of the Optionholder only by the Optionholder. Notwithstanding the foregoing, the Optionholder may, by delivering written notice to the Company, in a form satisfactory to the Company, designate a third party who, in the event of the death of the Optionholder, shall thereafter be entitled to exercise the Option.

6.6 Transferability of a Non-qualified Share Option. A Non-qualified Share Option may, in the sole discretion of the Committee, be transferable to a Permitted Transferee, upon written approval by the Committee to the extent provided in the Award Agreement. If the Non-qualified Share Option does not provide for transferability, then the Non-qualified Share Option shall not be transferable except by will or by the laws of descent and distribution and shall be exercisable during the lifetime of the Optionholder only by the Optionholder. Notwithstanding the foregoing, the Optionholder may, by delivering written notice to the Company, in a form satisfactory to the Company, designate a third party who, in the event of the death of the Optionholder, shall thereafter be entitled to exercise the Option.

6.7 Vesting of Options. Each Option may, but need not, vest and therefore become exercisable in periodic installments that may, but need not, be equal. The Option may be subject to such other terms and conditions on the time or times when it may be exercised (which may be based on performance or other criteria) as the Committee may deem appropriate. The vesting provisions of individual Options may vary. No Option may be exercised for a fraction of an Ordinary Share. The Committee may, but shall not be required to, provide for an acceleration of vesting and exercisability in the terms of any Award Agreement upon the occurrence of a specified event.

6.8 Termination of Continuous Service. Unless otherwise provided in an Award Agreement or in an employment agreement the terms of which have been approved by the Committee, in the event an Optionholder's Continuous Service terminates (other than upon the Optionholder's death or Disability), the Optionholder may exercise his or her Option (to the extent that the Optionholder was entitled to exercise such Option as of the date of termination) but only within such period of time ending on the earlier of (a) the date three months following the termination of the Optionholder's Continuous Service; or (b) the expiration of the term of the Option as set forth in the Award Agreement; *provided that*, if the termination of Continuous Service is by the Company for Cause, all outstanding Options (whether or not vested) shall immediately terminate and cease to be exercisable.

6.9 Extension of Termination Date. An Optionholder's Award Agreement may also provide that if the exercise of the Option following the termination of the Optionholder's Continuous Service for any reason would be prohibited at any time because the issuance of Ordinary Shares would violate the registration requirements under the Securities Act or any other Applicable Laws, then the Option shall terminate on the earlier of (a) the expiration of the term of the Option in accordance with ***Section* 6.1**; or (b) the expiration of a period after termination of the Participant's Continuous Service that is three months after the end of the period during which the exercise of the Option would be in violation of such registration or other securities law requirements.

6.10 Disability of Optionholder. Unless otherwise provided in an Award Agreement, in the event that an Optionholder's Continuous Service terminates as a result of the Optionholder's Disability, the Optionholder may exercise his or her Option (to the extent that the Optionholder was entitled to exercise

such Option as of the date of termination), but only within such period of time ending on the earlier of (a) the date 12 months following such termination; or (b) the expiration of the term of the Option as set forth in the Award Agreement. If, after termination, the Optionholder does not exercise his or her Option within the time specified herein or in the Award Agreement, the Option shall terminate.

6.11 Death of Optionholder. Unless otherwise provided in an Award Agreement, in the event an Optionholder's Continuous Service terminates as a result of the Optionholder's death, then the Option may be exercised (to the extent the Optionholder was entitled to exercise such Option as of the date of death) by the Optionholder's estate, by a person who acquired the right to exercise the Option by bequest or inheritance or by a person designated to exercise the Option upon the Optionholder's death, but only within the period ending on the earlier of (a) the date 12 months following the date of death; or (b) the expiration of the term of such Option as set forth in the Award Agreement. If, after the Optionholder's death, the Option is not exercised within the time specified herein or in the Award Agreement, the Option shall terminate.

6.12 Incentive Share Option $100,000 Limitation. To the extent that the aggregate Fair Market Value (determined at the time of grant) of an Ordinary Share with respect to which Incentive Share Options are exercisable for the first time by any Optionholder during any calendar year (under all plans of the Company and its Affiliates) exceeds U.S. $100,000, the Options or portions thereof which exceed such limit (according to the order in which they were granted in accordance with Section 422(d) of the Code) shall be treated as Non-qualified Share Options.

7. Provisions of Awards Other Than Options.

7.1 Share Appreciation Rights.

(a) General. Each Share Appreciation Right granted under the Plan shall be evidenced by an Award Agreement. Each Share Appreciation Right so granted shall be subject to the conditions set forth in this ***Section* 7.1**, and to such other conditions not inconsistent with the Plan as may be reflected in the applicable Award Agreement. Share Appreciation Rights may be granted alone or in tandem with an Option granted under the Plan.

(b) Grant Requirements. Any Share Appreciation Right that relates to a Non-qualified Share Option may be granted at the same time the Option is granted or at any time thereafter but before the exercise or expiration of the Option. Any Share Appreciation Right that relates to an Incentive Share Option must be granted at the same time the Incentive Share Option is granted.

(c) Term of Share Appreciation Rights. The term of a Share Appreciation Right granted under the Plan shall be determined by the Committee; *provided, however*, no Share Appreciation Right shall be exercisable later than the tenth anniversary of the Grant Date.

(d) Vesting of Share Appreciation Rights. Each Share Appreciation Right may, but need not, vest and therefore become exercisable in periodic installments that may, but need not, be equal. The Share Appreciation Right may be subject to such other terms and conditions on the time or times when it may be exercised as the Committee may deem appropriate. The vesting provisions of individual Share Appreciation Rights may vary. No Share Appreciation Right may be exercised for a fraction of an Ordinary Share. The Committee may, but shall not be required to, provide for an acceleration of vesting and exercisability in the terms of any Share Appreciation Right upon the occurrence of a specified event.

(e) Exercise. Upon exercise of a Share Appreciation Right, the holder shall be entitled to receive from the Company an amount equal to the number of Ordinary Shares subject to the Share Appreciation Right that is being exercised multiplied by the excess of (i) the Fair Market Value of an Ordinary Share on the date the Award is exercised, over (ii) the exercise price specified in the Share Appreciation Right or related Option.

(f) Exercise Price. The exercise price of a Share Appreciation Right shall be determined by the Committee, but shall not be less than 100% of the Fair Market Value of one Ordinary Share on the Grant Date of such Share Appreciation Right. A Share Appreciation Right granted simultaneously with or subsequent to the grant of an Option and in conjunction therewith or in the alternative thereto shall have the same exercise price as the related Option, shall be transferable only upon the same terms and conditions as the related Option, and shall be exercisable only to the same extent as the related Option; *provided, however*, that a Share Appreciation Right, by its terms, shall be exercisable only when the Fair Market Value per Ordinary Share subject to the Share Appreciation Right and related Option exceeds the exercise price per share thereof and no Share Appreciation Rights may be granted in tandem with an Option unless the Committee determines that the requirements of ***Section* 7.1(b)** are satisfied.

7.2 Restricted Awards.

(a) General. A Restricted Award is an Award of actual Ordinary Shares ("Restricted Share") or hypothetical Ordinary Share units ("Restricted Share Units") having a value equal to the Fair Market Value of an identical number of Ordinary Shares, which may, but need not, provide that such Restricted Award may not be sold, assigned, transferred or otherwise disposed of, pledged or hypothecated as collateral for a loan or as security for the performance of any obligation or for any other purpose for such period (the "Restricted Period") as the Committee shall determine. Each Restricted Award granted under the Plan shall be evidenced by an Award Agreement. Each Restricted Award so granted shall be subject to the conditions set forth in this ***Section* 7.2**, and to such other conditions not inconsistent with the Plan as may be reflected in the applicable Award Agreement.

(b) Restricted Share and Restricted Share Units.

(i) Each Participant granted Restricted Share shall execute and deliver to the Company an Award Agreement with respect to the Restricted Share setting forth the restrictions and other terms and conditions applicable to such Restricted Share. If the Committee determines that the Restricted Share shall be held by the Company or in escrow rather than delivered to the Participant pending the release of the applicable restrictions, the Committee may require the Participant to additionally execute and deliver to the Company (A) an escrow agreement satisfactory to the Committee, if applicable; and (B) the appropriate blank share power with respect to the Restricted Share covered by such agreement. If a Participant fails to execute an agreement evidencing an Award of Restricted Share and, if applicable, an escrow agreement and Share power, the Award shall be null and void. Subject to the restrictions set forth in the Award, the Participant generally shall have the rights and privileges of a shareholder as to such Restricted Share, including the right to vote such Restricted Share and the right to receive dividends.

(ii) The terms and conditions of a grant of Restricted Share Units shall be reflected in an Award Agreement. No Ordinary Shares shall be issued at the time a Restricted Share Unit is granted, and the Company will not be required to set aside a fund for the payment of any such Award. A Participant shall have no voting rights with respect to any Restricted Share Units granted hereunder. At the discretion of the Committee, each Restricted Share Unit (representing one Ordinary Share) may be credited with cash paid by the Company in respect of one Ordinary Share ("Dividend Equivalents"). Dividend Equivalents shall be paid only upon the vesting of a Restricted Share Unit and in accordance with Section 409A of the Code if paid to a tax resident of the United States.

(c) Restrictions.

(i) Restricted Share awarded to a Participant shall be subject to the following restrictions until the expiration of the Restricted Period, and to such other terms and conditions as may be set forth in the applicable Award Agreement: (A) if an escrow arrangement is used, the Participant shall not be entitled to delivery of the share certificate; (B) the shares shall be subject to the restrictions on transferability set forth in the Award Agreement; (C) the shares shall be subject to forfeiture to the extent provided in the applicable Award Agreement; and (D) to the extent such shares are forfeited, the share certificates shall be returned to the Company, and all rights of the Participant to such shares and as a shareholder with respect to such shares shall terminate without further obligation on the part of the Company.

(ii) Restricted Share Units awarded to any Participant shall be subject to (A) forfeiture until the expiration of the Restricted Period, to the extent provided in the applicable Award Agreement, and to the extent such Restricted Share Units are forfeited, all rights of the Participant to such Restricted Share Units, including Dividend Equivalents, shall terminate without further obligation on the part of the Company; and (B) such other terms and conditions as may be set forth in the applicable Award Agreement.

(iii) The Committee shall have the authority to remove any or all of the restrictions on the Restricted Share, Restricted Share Units whenever it may determine that, by reason of changes in Applicable Laws or other changes in circumstances arising after the date the Restricted Share or Restricted Share Units are granted, such action is appropriate.

(d) Restricted Period. With respect to Restricted Awards, the Restricted Period shall commence on the Grant Date and end at the time or times set forth on a schedule established by the Committee in the applicable Award Agreement. No Restricted Award may be granted or settled for a fraction of an Ordinary Share. The Committee may, but shall not be required to, provide for an acceleration of vesting in the terms of any Award Agreement upon the occurrence of a specified event.

(e) Delivery of Restricted Shares; Settlement of Restricted Share Units. Upon the expiration of the Restricted Period with respect to any Restricted Shares, the restrictions set forth in ***Section* 7.2(c)** and the applicable Award Agreement shall be of no further force or effect with respect to such shares, except as set forth in the applicable Award Agreement. If an escrow arrangement is used, upon such expiration, the Company shall deliver to the Participant, or his or her beneficiary, without charge, the share certificate evidencing the Restricted Shares which have not then been forfeited and with respect to which the Restricted Period has expired (to the nearest full share) and any cash dividends or share dividends credited to the Participant's account with respect to such Restricted Shares and the interest thereon, if any. Upon the expiration of the Restricted Period with respect to any outstanding Restricted Share Units unless payment is further deferred in compliance with Applicable Laws including, but not limited to Section 409A of the Code, the Company shall deliver to the Participant, or his or her beneficiary, without charge, one Ordinary Share for each outstanding vested Restricted Share Unit and cash equal to any Dividend Equivalents credited with respect to each such vested Restricted Share Unit in accordance with ***Section* 7.2(b)(ii)** hereof and the interest thereon or, at the discretion of the Committee, in Ordinary Shares having a Fair Market Value equal to such Dividend Equivalents and the interest thereon, if any; *provided*, *however*, that, if explicitly provided in the applicable Award Agreement, the Committee may, in its sole discretion, elect to pay cash or part cash and part Ordinary Shares in lieu of delivering only Ordinary Shares for vested Restricted Share Units. If a cash payment is made in lieu of delivering Ordinary Shares, the amount of such payment shall be equal to the Fair Market Value of an Ordinary Share as of the date on which the Restricted Period lapsed in the case of Restricted Share Units.

(f) Share Restrictions. Each certificate representing Restricted Share awarded under the Plan shall bear a legend in such form as the Company deems appropriate.

8. Securities Law Compliance. Each Award Agreement shall provide that no Ordinary Shares shall be purchased or sold thereunder unless and until (a) any then Applicable Laws have been fully complied with to the satisfaction of the Company and its counsel; and (b) if required to do so by the Company, the Participant has executed and delivered to the Company a letter of investment intent in such form and containing such provisions as the Committee may require. The Company shall use reasonable efforts to seek to obtain from each regulatory commission or agency having jurisdiction over the Plan such authority as may be required to grant Awards and to issue and sell Ordinary Shares upon exercise of the Awards; *provided*, *however*, that this undertaking shall not require the Company to register the Ordinary Shares, the Plan or any Award under the Securities Act with the U.S Securities and Exchange Commission or with any state securities commission or stock exchange or under any other Applicable Laws. If, after reasonable efforts, the Company is unable to obtain from any such regulatory commission or agency the authority which counsel for the Company deems necessary for the lawful issuance and sale of Ordinary Shares under the Plan, the Company shall be relieved from any liability for failure to issue and sell Ordinary Shares upon exercise of such Awards unless and until such authority is obtained.

9. Use of Proceeds from Shares. Proceeds from the sale of Ordinary Shares pursuant to Awards, or upon exercise thereof, shall constitute general funds of the Company.

10. Miscellaneous.

10.1 Acceleration of Exercisability and Vesting. The Committee shall have the power to accelerate the time at which an Award may first be exercised or the time during which an Award or any part thereof will vest in accordance with the Plan, notwithstanding the provisions in the Award stating the time at which it may first be exercised or the time during which it will vest.

10.2 Shareholder Rights. Except as provided in the Plan or an Award Agreement, no Participant shall be deemed to be the holder of, or to have any of the rights of a holder with respect to, any Ordinary Shares subject to such Award unless and until such Participant has satisfied all requirements for exercise of the Award pursuant to its terms and no adjustment shall be made for dividends (ordinary or extraordinary, whether in cash, securities or other property) or distributions of other rights for which the record date is prior to the date such Ordinary Shares are issued, except as provided in ***Section* 11** hereof.

10.3 No Employment or Other Service Rights. Nothing in the Plan or any instrument executed or Award granted pursuant thereto shall confer upon any Participant any right to continue to serve the Company or an Affiliate in the capacity in effect at the time the Award was granted or shall affect the right of the Company or an Affiliate to terminate (a) the employment of an Employee with or without notice and with or without Cause; or (b) the service of a Director pursuant to the Articles of Association of the Company or an Affiliate, and any applicable provisions of the corporate law of the state in which the Company or the Affiliate is incorporated, as the case may be.

10.4 Transfer; Approved Leave of Absence. For purposes of the Plan, no termination of employment by an Employee shall be deemed to result from either (a) a transfer of employment to the Company from an Affiliate or from the Company to an Affiliate, or from one Affiliate to another; or (b) an approved leave of absence for military service or sickness, or for any other purpose approved by the Company, if the Employee's right to reemployment is guaranteed either by a statute or by contract or under the policy pursuant to which the leave of absence was granted or if the Committee otherwise so provides in writing, in either case, except to the extent inconsistent with Applicable Laws, including but not limited to Section 409A of the Code if the applicable Award is subject thereto.

10.5 Withholding Obligations. To the extent provided by the terms of an Award Agreement and subject to the discretion of the Committee, the Participant may satisfy any foreign, federal, state or local tax withholding obligation relating to the exercise or acquisition of Ordinary Shares under an Award by any of the following means (in addition to the Company's right to withhold from any compensation paid to the Participant by the Company) or by a combination of such means: (a) tendering a cash payment; (b) authorizing the Company to withhold Ordinary Shares from the Ordinary Shares otherwise issuable to the Participant as a result of the exercise or acquisition of Ordinary Shares under the Award, *provided*, *however*, that no Ordinary Shares are withheld with a value exceeding the minimum amount of tax required to be withheld by Applicable Laws; or (c) delivering to the Company previously owned and unencumbered Ordinary Shares of the Company.

11. Adjustments Upon Changes in Shares. In the event of changes in the outstanding Ordinary Shares or in the capital structure of the Company by reason of any share or extraordinary cash dividend, share split, reverse share split, an extraordinary corporate transaction such as any recapitalization, reorganization, merger, consolidation, combination, exchange, or other relevant change in capitalization occurring after the Grant Date of any Award, Awards granted under the Plan and any Award Agreements, the exercise price of Options and Share Appreciation Rights, the maximum number of

Ordinary Shares subject to all Awards stated in ***Section* 4** will be equitably adjusted or substituted, as to the number, price or kind of an Ordinary Share or other consideration subject to such Awards to the extent necessary to preserve the economic intent of such Award. In the case of adjustments made pursuant to this ***Section* 11**, unless the Committee specifically determines that such adjustment is in the best interests of the Company or its Affiliates, the Committee shall, in the case of Incentive Share Options, ensure that any adjustments under this ***Section* 11** will not constitute a modification, extension or renewal of the Incentive Share Options within the meaning of Section 424(h)(3) of the Code and in the case of Non-qualified Share Options, ensure that any adjustments under this ***Section* 11** will not constitute a modification of such Non-qualified Share Options within the meaning of Section 409A of the Code. The Company shall give each Participant notice of an adjustment hereunder and, upon notice, such adjustment shall be conclusive and binding for all purposes.

12. Effect of Corporate Transaction.

12.1 The obligations of the Company under the Plan and the Award Agreements shall be binding upon any successor corporation or organization resulting from the merger, consolidation or other reorganization of the Company, or upon any successor corporation or organization succeeding to all or substantially all of the assets and business of the Company and its Affiliates, taken as a whole (a "Corporate Transaction").

12.2 In the event of a Corporate Transaction, the Board may take one or more of the following actions with respect to Options and Share Appreciation Rights: (i) make appropriate provision for the continuation of the Option or Share Appreciation Right by substituting on an equitable basis for the Ordinary Shares then subject to such Option or Share Appreciation Right either the consideration payable with respect to the outstanding Ordinary Shares in connection with the Corporate Transaction or securities of any successor or acquiring entity; (ii) require that Participants surrender their outstanding Options or Share Appreciation Rights in exchange for a payment by the Company, in cash or Ordinary Shares as determined by the Board, in an amount equal to the amount by which the then Fair Market Value of the Ordinary Shares subject to such vested Option or Share Appreciation Right exceeds the Exercise Price; or (iii) after giving Participants an opportunity to exercise to the extent vested their outstanding Options or Share Appreciation Rights, terminate any or all unexercised Options and Share Appreciation Rights at such time as the Board deems appropriate. Such surrender or termination shall take place as of the date of the Corporate Transaction or such other date as the Board may specify.

12.3 In the event of a Corporate Transaction with respect to outstanding Restricted Awards, the Board, shall make appropriate provision for the continuation of such Restricted Awards on the same terms and conditions by substituting on an equitable basis for the Ordinary Shares then subject to such Restricted Awards either the consideration payable with respect to the outstanding Ordinary Shares in connection with the Corporate Transaction or securities of any successor or acquiring entity. In lieu of the foregoing, in connection with any Corporate Transaction, the Board may provide that, upon consummation of the Corporate Transaction, each outstanding Restricted Award shall be terminated in exchange for payment of an amount equal to the consideration payable upon consummation of such Corporate Transaction to a holder of the number of Ordinary Shares comprising such Restricted Award to then extent then vested.

13. Amendment of the Plan and Awards.

13.1 Amendment of Plan. The Board at any time, and from time to time, may amend or terminate the Plan. However, except as provided in ***Section* 11** relating to adjustments upon changes in Ordinary Shares and ***Section* 13.3**, no amendment shall be effective unless approved by the shareholders of the Company to the extent shareholder approval is necessary to satisfy any Applicable Laws. At the time of such amendment, the Board shall determine, upon advice from counsel, whether such amendment will be contingent on shareholder approval.

13.2 Shareholder Approval. The Board may, in its sole discretion, submit any other amendment to the Plan for shareholder approval, including, but not limited to, amendments to the Plan intended to satisfy the requirements of Section 162(m) of the Code regarding the exclusion of performance-based compensation from the limit on corporate deductibility of compensation paid to certain executive officers.

13.3 Contemplated Amendments. It is expressly contemplated that the Board may amend the Plan in any respect the Board deems necessary or advisable to provide eligible Employees, Consultants and Directors with the maximum benefits provided or to be provided under the provisions of the Code relating to Incentive Share Options or to the nonqualified deferred compensation provisions of Section 409A of the Code and/or to bring the Plan and/or Awards granted under it into compliance therewith.

13.4 No Impairment of Rights. Rights under any Award granted before amendment of the Plan shall not adversely affect the Participant's material rights by any amendment of the Plan unless (a) the Company requests the consent of the Participant; and (b) the Participant consents in writing.

13.5 Amendment of Awards. The Committee at any time, and from time to time, may amend the terms of any one or more Awards; *provided*, *however*, that the Committee may not affect any amendment which would adversely affect the Participant's material rights under any Award unless (a) the Company requests the consent of the Participant; and (b) the Participant consents in writing.

14. General Provisions.

14.1 Other Compensation Arrangements. Nothing contained in this Plan shall prevent the Board from adopting other or additional compensation arrangements, subject to shareholder approval if such approval is required; and such arrangements may be either generally applicable or applicable only in specific cases.

14.2 Unfunded Plan. The Plan shall be unfunded. Neither the Company, the Board nor the Committee shall be required to establish any special or separate fund or to segregate any assets to assure the performance of its obligations under the Plan.

14.3 Recapitalizations and Reorganizations. Each Award Agreement shall contain provisions required to reflect the provisions of ***Sections* 11** and **12**.

14.4 Delivery. Upon exercise of a right granted under this Plan, the Company shall issue Ordinary Shares or pay any amounts due within a reasonable period of time thereafter. Subject to any statutory or regulatory obligations the Company may otherwise have, for purposes of this Plan, 30 days shall be considered a reasonable period of time.

14.5 No Fractional Shares. No fractional Ordinary Shares shall be issued or delivered pursuant to the Plan. The Committee shall determine whether cash, additional Awards or other securities or property shall be issued or paid in lieu of fractional Ordinary Shares or whether any fractional shares should be rounded, forfeited or otherwise eliminated.

14.6 Other Provisions. The Award Agreements authorized under the Plan may contain such other provisions not inconsistent with this Plan, including, without limitation, restrictions upon the exercise of the Awards, as the Committee may deem advisable.

14.7 Section 409A. The Plan is intended to comply with Section 409A of the Code to the extent subject thereto, and, accordingly, to the maximum extent permitted, the Plan shall be interpreted and administered to be in compliance therewith. Any payments described in the Plan that are due within the "short-term deferral period" as defined in Section 409A of the Code shall not be treated as deferred compensation unless Applicable Laws require otherwise. Notwithstanding anything to the contrary in the Plan, to the extent required to avoid accelerated taxation and tax penalties under Section 409A of the Code, amounts that would otherwise be payable and benefits that would otherwise be provided pursuant to the Plan during the 6 month period immediately following the Participant's termination of Continuous Service shall instead be paid on the first payroll date after the 6 month anniversary of the Participant's separation from service (or the Participant's death, if earlier). Notwithstanding the foregoing, neither the Company nor the Committee shall have any obligation to take any action to prevent the assessment of any excise tax or penalty on any Participant under Section 409A of the Code and neither the Company nor the Committee will have any liability to any Participant for such tax or penalty.

14.8 Disqualifying Dispositions. Any Participant who shall make a "disposition" (as defined in Section 424 of the Code) of all or any portion of Ordinary Shares acquired upon exercise of an Incentive Share Option within two years from the Grant Date of such Incentive Share Option or within one year after the issuance of the Ordinary Shares acquired upon exercise of such Incentive Share Option (a "Disqualifying Disposition") shall be required to immediately advise the Company in writing as to the occurrence of the sale and the price realized upon the sale of such Ordinary Shares.

14.9 Section 16. It is the intent of the Company that the Plan satisfy, and be interpreted in a manner that satisfies, the applicable requirements of Rule 16b-3 as promulgated under Section 16 of the Exchange Act so that Participants will be entitled to the benefit of Rule 16b-3, or any other rule promulgated under Section 16 of the Exchange Act, and will not be subject to short-swing liability under Section 16 of the Exchange Act. Accordingly, if the operation of any provision of the Plan would conflict with the intent expressed in this ***Section* 14.9** such provision to the extent possible shall be interpreted and/or deemed amended so as to avoid such conflict.

14.10 Beneficiary Designation. Each Participant under the Plan may from time to time name any beneficiary or beneficiaries by whom any right under the Plan is to be exercised in case of such Participant's death. Each designation will revoke all prior designations by the same Participant, shall be in a form reasonably prescribed by the Committee and shall be effective only when filed by the Participant in writing with the Company during the Participant's lifetime.

14.11 Expenses. The costs of administering the Plan shall be paid by the Company.

14.12 Severability. If any of the provisions of the Plan or any Award Agreement is held to be invalid, illegal or unenforceable, whether in whole or in part, such provision shall be deemed modified to the extent, but only to the extent, of such invalidity, illegality or unenforceability and the remaining provisions shall not be affected thereby.

14.13 Plan Headings. The headings in the Plan are for purposes of convenience only and are not intended to define or limit the construction of the provisions hereof.

14.14 Non-Uniform Treatment. The Committee's determinations under the Plan need not be uniform and may be made by it selectively among persons who are eligible to receive, or actually receive, Awards. Without limiting the generality of the foregoing, the Committee shall be entitled to make non-uniform and selective determinations, amendments and adjustments, and to enter into non-uniform and selective Award Agreements.

15. Effective Date of Plan. The Plan shall become effective as of the Effective Date, but no Award shall be exercised (or, in the case of a Restricted Share Award, shall be granted) unless and until the Plan has been approved by the shareholders of the Company, which approval shall be within 12 months before or after the date the Plan is adopted by the Board.

16. Termination or Suspension of the Plan. The Plan shall terminate automatically on the tenth (10^{th}) anniversary of the Effective Date. No Award shall be granted pursuant to the Plan after such date, but Awards theretofore granted may extend beyond that date. The Board may suspend or terminate the Plan at any earlier date pursuant to ***Section* 13.1** hereof. No Awards may be granted under the Plan while the Plan is suspended or after it is terminated

17. Choice of Law. The applicable laws of the Republic of Singapore, including but not limited to, the Singaporean Equity Remuneration Incentive Scheme and the Income Tax Act of Singapore, shall govern all questions concerning the construction, validity and interpretation of this Plan unless this Plan so specifies the interpretation of other Applicable Laws then, in such case, those Applicable Laws shall govern.

Exhibit 10.2

Harvard Real Estate Services ● Holyoke Center, Suite 800
Cambridge, Massachusetts 02138-3826

LEASE

Between

HARVARD REAL ESTATE – ALLSTON, INC.

as Landlord

and

SNBL USA, LTD.

as Tenant

Dated as of June 25, 2009

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Landlord and Tenant hereby covenant and agree as follows:

ARTICLE 1.0 PARTIES, PREMISES, AND DEFINITIONS

Section 1.1 Parties, Premises, Term, Rent. The parties to this Lease ("Landlord" and "Tenant") and the premises ("Premises") leased hereby are as follows:

Landlord: Harvard Real Estate – Allston, Inc., a Massachusetts corporation, its successors and assigns.

Tenant: SNBL USA, Ltd.

Tenant's Mailing Address: 6605 Merrill Creek Parkway, Everett, WA 98203, Attn: President

Tenant's Business Name: 6605 Merrill Creek Parkway, Everett, WA 98203

Date of this Lease: June , 2009

Premises: Approximately 4,348 rentable square feet located in the Building, as shown on Exhibit D attached thereto. At any time prior to the Rent Commencement Date, Tenant reserves the right, at Tenant's sole cost and expense, to have the Premises re-measured, using the BOMA standard for measuring office space, and to submit any proposed recalculation of the Premises rentable square footage to Landlord for Landlord's review and approval, not to be unreasonably withheld, conditioned or delayed. In the event of an adjustment in the Premises rentable square footage, Landlord and Tenant shall each execute and deliver an amendment to this Lease, adjusting the rentable square footage, Tenant's Proportionate Share, Basic Rent and the Tenant Improvement Allowance. In the event Landlord has paid to Tenant all or a portion of the Tenant Improvement Allowance as set forth in Section 10.2 hereof in an amount in excess of the adjusted Tenant Improvement Allowance, Tenant shall pay to Landlord, as Additional Rent within thirty (30) days of such adjustment, an amount equal to such excess. In the event Tenant's re-measurement of the Premises rentable square footage results in an increase in the Tenant Improvement Allowance, the time limit for Tenant to submit a request for reimbursement from the Tenant Improvement Allowance, as set forth in Section 10.2 shall be extended for a period of thirty (30) days following such adjustment of the Tenant Improvement Allowance.

Land: The land known and numbered as 1320 Soldiers Field Road, Boston, Massachusetts

Lease Commencement Date: The earlier to occur of (a) the date upon which Tenant obtains a building permit for the construction of tenant improvements in accordance with the space plan attached hereto as Exhibit D, or (b) August 1, 2009.

Lease Expiration Date: The last day of the calendar month in which the tenth (10th) anniversary of the Lease Commencement Date occurs.

Rent Commencement Date: The earlier to occur of (a) the date four (4) months after the issuance of a certificate of occupancy for the Premises or (b) May 1, 2010.

Permitted Uses: General office uses, laboratory uses, and no other uses.

Tenant's Proportionate Share: Twenty three and 56/100 percent (23.56%), which percentage has been determined by dividing the number of rentable square feet in the Premises by the Total Building Rentable Square Footage and multiplying the resulting quotient by one hundred (100).

Total Building Rentable Square Footage: For purposes of determining Tenant's Proportionate Share, the Building shall be deemed to contain a total of 18,453 rentable square feet.

Section 1.2 Other Definitions. As used herein, the following terms have the following meanings.

Additional Rent: See Section 3.3

Authorizations: All franchises, licenses, permits, approvals, variances, certificates, special permits, and other consents issued by Governmental Authorities pursuant to Legal Requirements that are or may be required for, or applicable to, the use and occupancy of the Premises, the conduct or continuation of one or more of the Permitted Uses therein, or the repair and restoration of the Premises, the Land, or the Building.

Bankruptcy Code: The federal Bankruptcy Code, 11 U.S.C. Sections 101-151326 & app., as the same may hereafter be amended, or any other federal bankruptcy law hereafter enacted.

Basic Rent: See Section 3.2.

Breach: The existence of any failure by Tenant to pay or perform any of its duties under this Lease (whether or not Landlord has given Tenant notice of such failure), whether or not occurring or ongoing during the period specified in this Lease for Tenant's cure of such failure.

Broker: Collectively, Jones Lang LaSalle Americas, Inc. and The Columbia Group Realty Advisors, Inc.. See Section 9.1.

Building: The entire building, if any, now or hereafter located on the Land, in which the Premises are located, including all improvements and alterations thereof and equipment and facilities used in connection therewith, whether now or hereafter existing.

Business Day, Business Days: Days other than Saturdays, Sundays, and legal holidays on which banks are closed in the municipality wherein the Premises are located.

Common Facilities: The facilities that serve the Premises and that are located in the Building or in, on, or above the Land, including alleys, sidewalks, parking areas, driveways, lobbies, hallways, toilets, stairways, shaftways, street entrances, and elevators.

Environmental Law: The following laws (as well as the regulations promulgated with respect to such laws) (i) Federal Water Pollution Control Act, 33 U.S.C. Section 1251 et seq., (ii) Federal Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. Section 6901 *et seq*, (iii) Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), 42 U.S.C. Section 9601 *et seq*, (iv) Hazardous Materials Transportation Act ("HMTA"), 49 U.S.C. Section 5101 *et seq*., (v) Massachusetts Oil and Hazardous Material Release Prevention and Response Act, M.G.L. c. 21E ("21E"), (vi) Massachusetts Hazardous Waste Management Act, M.G.L c. 21C, and (vii) Massachusetts Clean Waters Act, M.G.L. c. 21, Section 26 *et seq*., as any of the foregoing may be amended from time to time, as well as other and subsequently enacted or adopted environmental protection Legal Requirements.

Event of Default: An uncured Breach by Tenant that gives Landlord the right to terminate this Lease. See Article 6.0.

Extension Term: A portion of the Lease Term constituting a term of five years commencing on the day immediately following the Lease Expiration Date, if this Lease is validly extended under Article 11.0.

Fiscal Year: Landlord's annual accounting period ending on June 30 each year, or such other fiscal year as Landlord may from time to time adopt.

Governmental Authority: The United States of America, The Commonwealth of Massachusetts, the municipality in which the Premises are located, the county in which said municipality is located, and any political subdivision of any of them and any agency, department, commission, authority, court, board, bureau, or instrumentality of any of them.

Hazardous Material: Any pollutant, contaminant, hazardous or toxic substance, material, or waste or any oil, petroleum, or petroleum derivative that is or becomes regulated by any Environmental Law.

Insurance Requirements: All terms and provisions of any policy of insurance maintained by Landlord or Tenant and applicable to all or any part of the Land, the Building, or the Premises, and all requirements of the issuer of any such policy and all orders, rules, regulations, and other requirements of the National Board of Fire Underwriters (and any other body exercising similar functions) applicable to or affecting any condition, operation, use, or occupancy of the Land, the Building, the Premises, the sidewalks adjoining the Land, or any part or parts of either.

Involuntary Rate: 18% per annum (which is a daily rate of .0493150685%), but if such interest rate should ever exceed that permitted by law, then the Involuntary Rate shall be the highest interest rate permitted by law.

Late Payments: See Section 3.1.3.

Lease Term: The period commencing on the Lease Commencement Date and ending on the Lease Expiration Date, as may be extended or earlier terminated as set forth herein.

Lease Year: The Year-long period commencing on the Lease Commencement Date and each successive Year-long period of the Lease Term commencing on an anniversary of the Lease Commencement Date.

Legal Requirements: All statutes, codes, acts, rules, regulations, by-laws, and ordinances, including zoning by-laws and ordinances, building, health, and safety codes, historic preservation laws, and environmental protection laws, all executive orders and other administrative orders, the terms and conditions of all Authorizations, and all judgments, decrees, injunctions, and other judicial orders of or by any Governmental Authority that may at any time be applicable to parts or appurtenances of the Premises, the Land, or the Building, or the sidewalks adjoining the Land, or to any condition or use thereof.

Minimum Liability Insurance Coverage: $2,000,000. See Section 9.7.

Person: A natural person, or a legal entity, such as a corporation, limited, general, or limited liability trust, association, or other business entity.

Prime Rate: The prime commercial rate or "base rate" of interest, so-called, as announced from time to time by State Street Bank and Trust Company to be in effect at its principal office in Boston, Massachusetts, or, if discontinued, the "Prime Rate" as calculated and published by The Wall Street Journal, or if discontinued, such other standard as shall then be recognized by the banking community as having replaced the "prime rate."

Removable FETI: See Section 5.1.8 and Section 9.24.1.

Rent: The sum of Basic Rent and Additional Rent.

Rent Payment Address: c/o Harvard Real Estate Services, Holyoke Center, Suite 800, 1350 Massachusetts Avenue, Cambridge, Massachusetts 02138-3826.

Rent Payment Day: See Section 3.1.2.

Rules and Regulations: See Section 5.1.5.

Security Deposit: $5,800. See Article 8.

Tenant Construction Work: See Section 5.1.8.

Tenant FETI: Tenant-owned fixtures, tenant-owned built-in equipment, and tenant improvements constructed by Tenant as part of the Tenant Construction Work.

Section 1.3 Interpretation. In this Lease, the use of the terms "include" or "including" means "including without limitation." The article and section headings and captions are for convenience of reference only and shall not define or limit the contents of this Lease nor be used in construing this Lease.

ARTICLE 2.0 LEASING CLAUSES.

Section 2.1 Grant of Lease. Landlord hereby leases unto Tenant, and Tenant hereby takes and hires from Landlord, the Premises on the terms, covenants, provisions, and conditions set forth in this Lease.

Section 2.2 Encumbrances, Common Facilities, Exceptions, and Reservations. The Premises are hereby leased subject to existing party wall agreements and to all recorded encumbrances. Landlord hereby excepts and reserves unto Landlord the right to place in the Premises (in such a manner as to reduce to a minimum extent practicable the interference with Tenant's use of the Premises) utility lines, pipes, wires, conduits, and the like (collectively, "**Conduits**"), to serve portions of the Land or the Building other than the Premises, and to replace, maintain, and repair such Conduits as well as such other Conduits as are located in, on, or over the Premises. As part of this Lease, Tenant shall have the right to the non-exclusive use of the Common Facilities in common with Landlord and others from time to time thereto entitled, including without limitation the exterior loading dock area. Tenant acknowledges that Tenant's use of the exterior loading dock area shall require Tenant to construct, as part of Tenant's Work, an exterior entrance door from the Premises to the exterior loading dock area as shown on Exhibit D attached hereto. Tenant shall have the right to use at no additional cost to Tenant (a) four (4) designated parking spaces in the surface parking lot located on the Land for Tenant's exclusive use; and (b) four (4) unassigned parking spaces in the parking lot located at 1330 Soldiers Field Road for Tenant's use in common with Landlord and others entitled thereto. Tenant and Tenant's employees and contractors shall have twenty-four (24)-hour access to the Building and the Premises, seven (7) days per week, in accordance with Landlord's reasonable rules and regulations.

Section 2.3 Use. Tenant shall use the Premises only for the Permitted Uses and no other uses. Tenant shall not use or permit the use of any portion of the Premises for any of the prohibited uses set forth in Exhibit E. Tenant shall not use or permit the use of any portion of the Building for the operation of a bowling alley, adult bookstore, so-called Head Shop, massage parlor, or other enterprise similar to the foregoing, whose business is the sale, rental, or promotion of sexually explicit material, acts or entertainment, nor for the operation of any bar or tavern.

Section 2.4 Lease Term, Possession. Landlord hereby leases the Premises to Tenant for the Lease Term.

2.4.1 Tenant waives any right to rescind this Lease by reason of, or to recover any damages that may result from, Landlord's failure to deliver possession of the Premises to Tenant on the Lease Commencement Date. Regardless of the Date of this Lease or the date of delivery of possession of the Premises, Landlord shall have no duty to deliver to Tenant possession of the Premises until the Lease Commencement Date, and the Lease Commencement Date and, if applicable the Rent Commencement Date, shall be deemed postponed until possession is delivered to Tenant. Upon the request of either party, the parties will execute a memorandum confirming the Lease Commencement Date following the delivery of possession of the Premises to Tenant. Notwithstanding the foregoing, and subject to delays due to Force Majeure and any delay caused by Tenant, in the event Landlord fails to deliver possession of the Premises as required by this Lease within 4 calendar months of the Lease Commencement Date, then Tenant may elect, upon not less than thirty (30) days prior written notice to Landlord, given any time prior to the date of such delivery, to terminate this Lease; provided, however, Landlord may negate such termination notice in the event Landlord notifies Tenant in writing that the Premises is available for deliver prior to the expiration of such thirty (30) day period.

2.4.2 If Tenant has possession of any part of the Premises before the Lease Commencement Date, Tenant shall perform and observe all of Tenant's covenants from and after the date of such possession, except Tenant shall not be required to pay Rent until the Rent Commencement Date, provided however, Tenant shall be required to pay the cost of any utilities used by Tenant, Tenant's contractors, agents or employees prior to the Rent Commencement Date.

ARTICLE 3.0 RENT.

Section 3.1 Payment of Rent, General.

3.1.1 Payment of Rent. Commencing on the Rent Commencement Date and continuing through the Lease Term, Tenant has a duty to pay when due (without any notice, demand, offset, deduction, or abatement whatever) the Rent and any other payments to be made under this Lease, and all charges for electricity and other utilities and services that are metered or sub-metered with respect to the Premises or that are separately billed or invoiced to Tenant, Landlord, or the Premises, or that are delivered or attributable to the Premises, including heating, air conditioning, water, sewer use, oil, gas, trash removal, telephone, and other services and utilities, and, if any property of Tenant or any interest of Tenant in the Premises is taxed by a taxing authority, to pay such taxes and impositions when due. Except as may be expressly provided herein, Tenant shall have no right to withhold or abate any payment of Rent or other payment, or to set off any amount against the Rent or other payment then due and payable, or to terminate this Lease, because of any Landlord's failure or alleged failure to perform its duties under this Lease.

3.1.2 Application of Payments. All Rent payments are due to Landlord on the first day of each calendar month (the "**Rent Payment Day**") unless otherwise specifically provided. In all cases, Tenant shall pay the Rent in United States currency by recent check made payable directly to "Harvard University" without intervening endorsement and shall be delivered in person or mailed to the Rent Payment Address, or such other address as Landlord may from time to time by notice direct. Rent shall be prorated for any partial Lease Year at the end of the Term.

3.1.3 Late Payments. If any installment of Rent or any other payment to be made by Tenant to Landlord under this Lease is not received by Landlord within ten days after the due date, then in such event, Tenant shall pay to Landlord as a late charge to reimburse Landlord for the extra cost associated with such delinquency ("**Late Payment**") (i) an amount equal to three percent of the installment of Rent (or other payment) that was not paid when due, plus (ii) interest on the unpaid amount computed at the Involuntary Rate from the due date or date of demand, as the case may be, through the date that the installment (or other payment) is received by Landlord.

Section 3.2 Basic Rent. Tenant shall pay rent ("**Basic Rent**") annually to Landlord during the Lease Term commencing on the Rent Commencement Date, by equal monthly installment payments in advance, on each Rent Payment Day, each equal to one-twelfth of the applicable annual Basic Rent. Tenant shall pay the first month's Basic Rent to Landlord on the Rent Commencement Date.

3.2.1 Proration for Partial Months. If the Rent Commencement Date does not occur on the first day of a calendar month, the first monthly installment of Basic Rent shall be appropriately prorated; such prorated monthly installment together with the first full month's installment of Basic Rent shall be paid to Landlord on the Rent Commencement Date. If the Lease Expiration Date does not occur on the last day of a calendar month, the installment of Basic Rent for such partial month shall be prorated.

3.2.2 Basic Rent. The annual Basic Rent shall be $69,568.00 per annum ($5,797.33 per month).

Section 3.3 Additional Rent. Unless otherwise expressly stated herein, all payments due to Landlord from Tenant under this Lease, other than Basic Rent, are deemed to be "**Additional Rent**."

Section 3.4 Expense Allocation.

3.4.1 Additional Charges - General Covenant. Tenant covenants and agrees to pay to Landlord, as Additional Rent, an amount equal to the product of (a) Tenant's Proportionate Share, and (b) Landlord's Operating Expenses.

Appropriate adjustments shall be made for any portion of a year at the beginning or end of the Term.

3.4.2 Payment. Additional charges for Operating Expenses under this Section 3.4 shall be paid for any portion of a month at the beginning of the Term and thereafter in monthly installments on the first day of each calendar month in amounts reasonably estimated by Landlord for the then current calendar year. Landlord may from time to time revise such estimates based on information affecting the calculation hereunder. Within one hundred twenty (120) days after the end of each calendar year, Landlord will provide Tenant with a statement of the total amount of additional charges for Operating Expenses for such calendar year. Upon issuance of Landlord's statement, there shall be an adjustment between Landlord and Tenant for the calendar year covered by such statement to the end that Landlord shall have received the exact amount of additional charges shown on the statement. Any overpayments by Tenant hereunder shall be credited against the next payments of Additional Rent due under this Lease, provided there are no outstanding amounts due Landlord under this Lease at such time. Any underpayments by Tenant shall be due and payable within twenty (20) days of delivery of Landlord's statement. With respect to the calendar year in which the Term ends, the adjustment shall be pro rated for the portion of the year included in the Term, but shall take place nevertheless at the times provided in the preceding sentences. Landlord's statement with respect to Operating Expenses shall be binding upon, and may not be disputed by, Tenant unless the statement is incorrect and is disputed by Tenant (within 60 days of Tenant's receipt of Landlord's statement) by a notice to Landlord ("Tenant's Dispute Notice") specifically stating the grounds for dispute. Tenant's failure so to dispute Landlord's statement shall constitute a waiver of Tenant's right to dispute the statement. Notwithstanding any dispute concerning Landlord's statement, payments shall be made by the parties in accordance with Landlord's statement at the time and in the manner set forth above, and if necessary there shall be a further adjustment between the parties at the time the dispute is resolved.

3.4.3 "Landlord's Operating Expenses" - Definition. "Landlord's Operating Expenses" means all costs of Landlord in owning, servicing, operating, managing, maintaining, and repairing the Land and the Building, and providing services to tenants including, without limitation, the costs of the following (regardless of whether the cost thereof is paid out of any reserves established by Landlord, provided the funding of such reserves shall not be included in Landlord's Operating Expenses): (i) supplies, materials and equipment purchased or rented, total wage and salary costs paid to, and all contract payments made on account of, all persons engaged in the operation, maintenance, cleaning and repair of the Building and Land, including Social Security, old age and unemployment taxes and so-called "fringe benefits"; (ii) building services furnished to tenants of the Building at Landlord's expense and maintenance and repair of and services provided to or on behalf of the Building performed by Landlord's employees or by other persons under contract with Landlord; (iii) utilities consumed and expenses incurred in the operation, maintenance and repair of the Building including, without limitation, oil, gas, electricity (other than electricity to tenants in their Premises if Tenant is directly responsible for payment under this Lease on account of electricity consumed by Tenant), water, sewer and snow removal; (iv) casualty, liability and other insurance in such amounts and insuring such risks as Landlord may from time to time reasonably decide, and unreimbursed costs incurred by Landlord which are subject to an insurance deductible; (v) costs in the nature of common area and facilities costs of the Building including without limitation, operation, maintenance and servicing of the lobby areas, snow plowing and removal, grounds maintenance and the like; (vi) management and building services fees not to

exceed five percent (5%) of the aggregate Base Rent and Additional Rent due from all tenants of the Building for the applicable calendar year; and (vii) "Landlord's Taxes" as defined below. Landlord's Operating Expenses shall also include amortized portion (as set forth below) of only such expenditures for capital improvements and capital equipment that are made by reason of any Legal Requirement or any Insurance Requirement or that are intended or expected to reduce or moderate the Operating Costs of the Land and Building (collectively, the "Capital Costs"). The amortization of Capital Costs shall be made on a straight-line basis over a period equal to the useful life of the capital item replaced, determined in accordance with generally accepted accounting principles, with an interest factor equal to the Prime Rate plus two percentage points (2.00%) existing at the time of the expenditure of the Capital Costs.

Notwithstanding the foregoing, Landlord's Operating Expenses shall not include:

(1) The costs of the initial construction of the Building and costs to repair latent defects in the Building incurred within the first five years after the completion of construction of the Building; and repairs, alterations, additions, improvements or replacements made to comply with the Legal Requirements in effect as of the Lease Commencement Date.

(2) Leasing fees and commissions, reasonable attorney's fees incurred in connection with leases, rent concessions given by Landlord, build-out allowances, moving expenses reimbursed to tenants; costs (including reasonable attorney's fees) of removing property of former tenants or occupants of the Building.

(3) Landlord's interest and principal payment on indebtedness, debt amortization, ground rent, and refinancing costs for any mortgage or any ground lease of the Land or Building.

(4) The cost of any item or service to the extent reimbursed by insurance proceeds of insurance policies required to be maintained under the Lease.

(5) The cost of repairs, restoration, replacements or other work occasioned by (i) the exercise by governmental authorities of the right of eminent domain, whether such taking be total or partial, to the extent that Landlord is compensated by such governmental authority for such repairs, restoration, replacements or other work, (ii) the adjudicated negligence or adjudicated intentional tort of Landlord, or any representative, contractor, employee or agent of Landlord (including the costs of any deductibles paid by Landlord), and/or (iii) the act of any other tenant in the Building, or any other tenant's agents, contractors, employees, licensees or invitees to the extent the applicable cost is, in the Landlord's reasonable judgment, practically recoverable from such person.

(6) Wages, salaries benefits, perquisites and compensation paid or given to (i) executives, shareholders, officers, directors, members, managers or partners of Landlord, (ii) any principal, member or partner of the entity or entities from time to time comprising Landlord, or (iii) employees above the level of Assistant Director.

(7) Non-cash items, such as deductions for depreciation and amortization of the Building and the Building equipment, or interest on capital invested (except to the extent expressly permitted by in this section).

(8) The cost of any service provided to Tenant or other tenants or occupants of the Building for which Landlord is entitled to be directly reimbursed by Tenant or other tenant, as the case may be, (other than as a pro rata share of Operating Expenses).

(9) Charitable or political contributions and/or trade association dues.

(10) Any cost, expense, charge, fine, penalty, assessment, liability, claims or damages related to the existence, testing for, use, generation, disposal, release, discharge, removal, remediation, transportation or storage of Hazardous Materials from the Building or Premises (provided that nothing herein shall affect Tenant's obligations under Section 5.1.14).

(11) Interest, penalties or other costs arising out of Landlord's failure to make timely payments of its obligations.

(12) Asset management fees and any property management fees of any property management firm based on a rate to the extent in excess of the rate of such fees included in the Operating Expenses.

(13) Tenant relations costs and other costs incurred in advertising and promotional activities for the Building.

(14) Costs incurred in connection with the actual or contemplated sale, financing, refinancing, mortgaging, syndicating, selling, or change of any ownership interest in the Building (or any portion thereof) or in any entity comprising Landlord, including, without limitation, brokerage commissions, attorneys, and accountants' fees, closing costs, title insurance premiums, transfer taxes and interest charges.

(15) The rent, operating expenses and real estate taxes applicable to Landlord's on-site management or leasing office, or any other offices or spaces of Landlord or any related entity or rental for any space in the Building set aside for conference facilities, storage facilities or exercise facilities.

(16) Costs of Landlord related to formation and continuing legal qualification of the Landlord entity (and any constituent entities thereof), internal matters including but not limited to preparation of tax returns and financial statements and gathering of data, and any other costs and expenses associated with the operation of the business of the entity or entities which constitute(s) Landlord.

(17) Landlord vault rental (if any).

(18) Costs related to any improvements or land not included in the Building, including any allocation of costs incurred on a shared basis, such as centralized accounting costs, unless the allocation is made on a reasonable and consistent basis that fairly reflects the share of any costs actually attributable to the Building.

(19) Reserves for future Operating Expenses.

(20) Landlord's general corporate overhead and administrative expenses, but only to the extent included within the management and building service fees described in clause (vi) above so as to eliminate any double counting of such expenses.

"Landlord's Taxes" means all taxes, assessments and similar charges assessed or imposed for the then current calendar year by any governmental authority attributable to the Building or Land including personal property associated therewith), all reduced by any net amounts received as an abatement or reduction of such taxes, assessments and charges for such year. The amount of any special taxes, special assessments and agreed or governmentally imposed "in lieu of tax" or similar charges shall be included in Landlord's Taxes for any year but shall be limited to the amount of the installment (plus any interest, other than penalty interest, payable thereon) of such special tax, special assessment or such charge required to be paid during or with respect to the year in question. Landlord's Taxes include expenses, including reasonable fees of attorneys, appraisers and other consultants, incurred in connection with any efforts to obtain abatements or reduction or to assure maintenance of Landlord's Taxes for any year wholly or partially included in the Term, whether or not successful and whether or not such efforts involved filing of actual abatement applications or initiation of formal proceedings. Landlord's Taxes exclude income taxes of general application and all estate, succession, inheritance, transfer taxes, reserves for future Landlord's Taxes, any personal property taxes attributable to sculptures, paintings or other objects of art, except for objects of art installed in the Common Facilities pursuant to requirements of Governmental Authority, and interest and penalties incurred as a result of Landlord's late payment. If at any time during the Term there shall be assessed on Landlord, in addition to or lieu of the whole or any part of the ad valorem tax on real or personal property, a capital levy or other tax on the gross rents or other measures of Building operations, or a governmental income, franchise, excise or similar tax, assessment, levy, charge or fee measured by or based, in whole or in part, upon valuation of real estate, gross rents or other measures of building operations or benefits of governmental services furnished to the Building, then any and all of such taxes, assessments, levies, charges and fees, to the extent so measured or based, shall be included within the term Landlord's Taxes, but only to the extent that the same would be payable if the Building and Land were the only property of Landlord.

3.4.3.1 If the actual percentage of occupancy of the Building is less than one hundred percent for any Lease Year, including the Lease Year in which the Base Operating Expenses are calculated (based on average occupancy for such Lease Year), the Operating Expenses incurred shall be reasonably projected by Landlord to be the estimated Operating Expenses that would have been incurred if the Building were one hundred percent occupied for such Lease Year (with all tenants paying full rent, as contrasted with free rent, half rent, or like rent

concession) and all services and utilities that are required hereunder to be supplied to tenants were supplied to tenants occupying 100% of the rentable area of the Building and such projected amount shall be included in Operating Expenses for such Lease Year, provided that such amount are determined to have been the variable Operating Expenses for such Lease Year.

3.4.4 Record Keeping. Landlord shall keep full and accurate books of account covering Landlord's Operating Expenses. Landlord shall retain the books of account and all supporting documents for at least one year after the expiration of each Fiscal Year. Upon timely delivery of Tenant's Dispute Notice, Tenant shall have the right at its sole cost, during business hours of Landlord and at the office of Landlord, to inspect Landlord's books of account and all supporting documents with respect to matters set forth in Landlord's Operating Expense statement for such Fiscal Year. Such inspection may be made only by a nationally recognized independent certified public accounting firm first approved by Landlord, which approval shall not be unreasonably withheld. As a condition to performing any such inspection, Tenant and its examiners shall be required to execute and deliver to Landlord an agreement, in form reasonably acceptable to Landlord, agreeing to keep confidential any information that it receives or obtains about Landlord or the Building in connection with such inspection.

ARTICLE 4.0 LANDLORD'S COVENANTS

4.1 Quiet Enjoyment. Landlord covenants with Tenant that Tenant may quietly hold, occupy, and enjoy the Premises during the Lease Term, free from interference by Landlord, or any party claiming by, through or under Landlord, subject nonetheless, to all of the provisions, terms, and conditions of this Lease.

4.2 Landlord Services. Landlord shall furnish the following services: (i) water for drinking and for restrooms in the Common Facilities, and, subject to Landlord's approval, water at Tenant's expense for any private restrooms and office kitchen requested by Tenant; (ii) janitorial service in the Common Areas on Business Days; and (iii) electricity and gas to the Premises for general office use, in accordance with and subject to the terms and conditions this Lease. In no event shall Landlord be liable for any interruption or failure of any utility service, including, without limitation, water and sewer, except as specifically set forth in Section 9.8.1 hereof. Landlord shall maintain and repair the roof (including roof membrane) and Building structure, the cost of which shall be included in Operating Expenses, provided, however, any replacement of the roof or structural elements of the Building shall be at Landlord's sole cost and expense and shall not be included in Operating Expenses. Landlord may impose a reasonable charge for any additional utilities or building services, which shall be paid monthly by Tenant as Additional Rent on the same day that the monthly installment of Base Rent is due.

ARTICLE 5.0 COVENANTS.

Section 5.1 Tenant's Covenants.

5.1.1 Consumption of Utilities. Tenant shall not, without Landlord's prior written consent in each instance, exceed the capacity of the electrical system serving the Premises, and Landlord may, upon prior notice to Tenant and at Landlord's sole cost, audit Tenant's use of electric power to determine Tenant's compliance herewith. If Landlord, permits such excess usage, Tenant shall pay (as Additional Rent) for the cost of such excess power, together with the cost of installing any additional risers, meters, or other facilities that may be required to furnish or measure such excess power to the Premises. Further, if Tenant requires, consumes, or uses a disproportionate amount of a supplied utility, and it is not separately metered, Tenant shall pay to Landlord as Additional Rent an equitable and reasonable charge for such additional utility use. If Tenant requires, uses, or consumes water for any purpose other than ordinary lavatory and drinking purposes (excluding restaurant-related purposes that require Tenant to have its water use separately metered), Landlord may install a water meter or submeter to measure Tenant's water consumption. In such event, Tenant shall pay for such meter or sub-meter and at Tenant's cost, keep such equipment in good working order and repair. Landlord and Tenant acknowledge and agree that electricity for the Premises, including, without limitation, lights, electrical outlets and the heating, ventilation and air conditioning ("HVAC") systems serving the Premises exclusively, are separately metered. Tenant shall pay, directly to the applicable electric utility provider, all costs of electricity supplied to the Premises, including the HVAC system serving the Premises.

5.1.2 Care of Premises. Damage by fire, other casualty, eminent domain, and reasonable wear and use excepted, Tenant shall keep the Premises (including, without limitation, the HVAC system exclusively serving the Premises) substantially in as good order, repair, and condition as the same are in at the commencement of the Lease Term, or may, in accordance with the terms of this Lease, be put in thereafter; shall keep the Premises clean and neat; and shall conform to Landlord's reasonable requests from time to time relating to the appearance of the Premises, such requests to be reasonably consistent with keeping the appearance of the Premises to the general standard of similar properties of Landlord in the neighborhood. The exception of reasonable wear and use contained in this Section 5.1.2 shall not be construed to permit Tenant to maintain the Premises in anything less than good, serviceable and tenantable condition. Tenant shall maintain the HVAC system exclusively serving the Premises using a maintenance contractor and annual maintenance plan reasonably approved by Landlord and shall, upon request, provide evidence of such maintenance to Landlord.

5.1.3 Sidewalks. If the Premises have an exclusive entrance to the Building, Tenant shall keep the sidewalks, driveways, and passageways on or adjacent to the Premises, and the entrance and stairs to the Premises, clean and free of dirt, debris, obstacles, graffiti, snow, ice, and any condition of such sidewalks, driveways, and passageways, that would endanger persons using them.

5.1.4 Overloading, Nuisance, Flammables, Increase in Insurance Premiums. Tenant shall not injure, nor overload the capacity of, the Building systems and structural components, nor deface the Premises or the Building, nor permit any nuisance on the Premises or the emission therefrom of any objectionable noise or odor, nor permit any use of the Premises that is improper, offensive, contrary to Legal Requirements or Insurance Requirements, or liable to invalidate (or increase the premiums for) any insurance on the Building or its contents or liable to render necessary any

alterations or additions to the Building. If for any reason Tenant's use of the Premises results in an increase of the premiums for the insurance of Landlord (or any tenant of the Building), Tenant shall reimburse Landlord and such other tenants of the Building for all such insurance premium increases, which shall be due and payable as Additional Rent. Tenant shall not permit any licensees, employees, agents, invitees, or visitors of Tenant to violate any duty of Tenant hereunder, or any of the Rules and Regulations from time to time promulgated by Landlord.

5.1.5 No Obstruction; Rules and Regulations. Tenant shall not obstruct in any manner any of the Common Facilities in the Building, or the sidewalks or other approaches to the Building. Tenant shall comply with the Rules and Regulations attached hereto as Exhibit A, including such amendments thereto as Landlord may promulgate from time to time with regard to the care and use of the Premises, the Building, its facilities, and approaches thereto, provided, however, that such amendments to the Rules and Regulations shall not be binding upon Tenant until Tenant has received a written copy of such amendments and further provided that such amendments shall not increase Tenant's monetary obligations hereunder or have a material adverse effect on Tenant's Permitted Use of the Premises.

5.1.6 Janitorial Service. Tenant shall provide and pay for all janitorial and cleaning services for the Premises.

5.1.7 Compliance with Laws; Safety; Health. Tenant shall keep the Premises (which shall include Tenant's exclusive Building entrance) in a safe and sanitary condition and comply with and keep the Premises (which shall include Tenant's exclusive Building entrance) in compliance with, all Legal Requirements and Insurance Requirements now or hereafter existing and as required by the occupancy or use made of the Premises by Tenant. Tenant shall make all required repairs, alterations, replacements, or additions in and to the Premises (which shall include Tenant's exclusive Building entrance) and shall install any required devices or equipment. Notwithstanding any contrary provisions of the Americans with Disabilities Act, 42 U.S. Code 12101 et seq., as it may be amended from time to time (and the regulations and Accessibility Guidelines for Buildings and Facilities issued pursuant thereto) (collectively, "**ADA**"), all costs (including reasonable attorney's fees) associated with alterations to the Premises, and access thereto (which shall include Tenant's exclusive Building entrance), whether or not required by ADA or other Legal Requirements, shall be at Tenant's cost, provided however that Tenant shall not be responsible for such alterations to the Premises which were required due to the work performed by Landlord or another tenant in the Building and not required or requested by Tenant. If any of Tenant Construction Work triggers the need for other alterations under either ADA or other Legal Requirements, such alterations shall be performed by Tenant as part of the Tenant Construction Work (or by Landlord, at Landlord's election, if the alterations are needed in areas of the Building other than the Premises) in either case at Tenant's cost. Tenant shall be responsible to ensure that the Premises, and access thereto (which shall include Tenant's exclusive Building entrance), comply with the ADA. Tenant shall be responsible for obtaining all Authorizations that are needed for Tenant's use of the Premises.

5.1.8 Landlord's Consent Required for Tenant Construction Work. Tenant shall not make in or to the Premises or the Building any construction work, alterations, or additions (collectively, "**Tenant Construction Work**") or any holes in the walls, partitions, ceilings, or floors, or paint or place therein or thereon any signs, or place therein or thereon any awnings, aerials, flagpoles, or the like, without on each occasion obtaining the prior written consent of Landlord, which consent may not be unreasonably withheld or delayed. Landlord's consent may be subject to conditions deemed appropriate by Landlord, in its reasonable discretion, including review of plans and specifications, approval of the contractors and subcontractors, and receipt of an architect's certificate that the work complies with Legal Requirements, an architect's certificate of completion, and (if required by Legal Requirements) a certificate of the municipal building inspector of final completion. Tenant shall cause any Tenant Construction Work in the Premises to be performed expeditiously, with first-class workmanship and materials and in compliance with all applicable Legal Requirements and Insurance Requirements; shall pay for the same when due; shall remove promptly (and not later than twenty-five days in any event), or bond to Landlord's satisfaction, any materialmen's or mechanics liens filed in connection therewith; and shall save Landlord harmless and indemnified from all injury, loss, claims, costs (including reasonable attorney's fees), or damage to any person or property occasioned by or arising out of such Tenant Construction Work. If Landlord deems it appropriate to supervise any of the Tenant Construction Work, Tenant shall pay the reasonable third-party cost of such supervision. Tenant shall cause contractors employed by Tenant to carry worker's compensation insurance in accordance with statutory requirements and commercial general liability insurance and automobile liability insurance covering such contractors on or about the Premises (and Landlord at Tenant's cost may obtain builder's risk insurance), and such other appropriate insurance coverage in such reasonable amounts as Landlord may reasonably require, and Tenant shall submit certificates evidencing such coverage to Landlord before the commencement of such Tenant Construction Work. Tenant may not grant any security interest in any of the materials installed as a part of the Tenant Construction Work. Nothing in this Section 5.1.8 shall be deemed to waive the requirement that Tenant obtain Landlord's prior written consent to any such Tenant Construction Work, except as set forth below with respect to Permitted Alterations. Tenant shall provide to Landlord as-built plans of the Premises immediately after the Tenant Construction Work is completed. Tenant shall pay all increases in Real Estate Taxes attributable to the Tenant Construction Work. Landlord's consent is also required for installation of any Tenant FETI constructed as part of the Tenant Construction Work. At the time of Tenant's installation of any fixtures or built-in equipment, Tenant may request in writing that Landlord designated such items of Tenant FETI as "**Removable FETI**" for purposes of Section 9.24.1. Notwithstanding the foregoing, Landlord consent shall not be required for any cosmetic alteration, improvement or work performed by Tenant (the "Permitted Alteration") which (i) has no adverse effect on the Building's structure or systems, including, without limitation, the electrical and plumbing systems of the Building; (ii) is not visible from the exterior of the Premises; (iii) does not result in a violation of, or require a change in, any certificate of occupancy for the Building; (iv) does not affect any area of the Building outside of the Premises; and (v) does not cost more than $50,000 in any one instance.

5.1.9 Licenses and Permits. Tenant shall procure, maintain, and observe any and all licenses, permits, special permits, variances, or other Authorizations required by reason of the Permitted Uses of the Premises by Tenant or any Tenant Construction Work by Tenant that has been consented to by Landlord, and Tenant at its cost shall provide copies of same to Landlord. Nothing herein shall be construed to require Tenant to obtain any licenses, permits, special permits, variances or other Authorizations for the Land or the Building, except such licenses, permits, special permits, variances, approvals or other Authorizations which are directly related to the Tenant's Work and Tenant's intended use of the Premises.

5.1.10 Wireless Interference. If Tenant installs a wireless computer network or other device that radiates electromagnetic waves, Tenant shall ensure that it does not interfere with the wireless networks, cellular telephones, and electronic equipment of Landlord or of other tenants or other third-parties in the vicinity in existence prior to such Tenant's installation.

5.1.11 Use, Continuous Use. Tenant may not use all or any part of the Premises in any manner that in Landlord's reasonable judgment would adversely affect the use and enjoyment of the Building or Land by any other tenant, occupant, visitor, or invitee, the character or reputation of the Building, or publicly embarrass Landlord or any tenant or occupant of the Building. Tenant shall not conduct or permit on or in the Premises any auction sale or "going out of business" sale.

5.1.12 Keys. Upon expiration or earlier termination of the Lease, Tenant shall deliver the keys of the Premises to Landlord. Tenant shall not change or replace any locks and shall not add new locks without the prior written permission of Landlord. Any additional or replacement locks shall become the property of Landlord and shall not be removed by Tenant.

5.1.13 Security Alarm. Tenant shall not install any security alarms or systems without prior written consent from Landlord, which consent will not be withheld unreasonably by Landlord. Tenant shall supply Landlord keys, devices, or instructions, as the case may be, for deactivating said security alarms or systems. Tenant shall be responsible for all costs for said security alarms or systems and said alarms or systems shall become part of the real estate at the election of Landlord.

5.1.14 Hazardous Material.

(a) In connection with Tenant's use of the Premises, Tenant shall only use Hazardous Materials of the kind and in amounts and in the manner customarily found and used in premises used for the Permitted Uses and to maintain and operate the equipment and machines located in the Premises. Without limiting the foregoing, Tenant shall be permitted to use, handle and store Hazardous Materials of the types listed on Schedule 5.1.14 hereof, attached hereto and made a part hereof, in amounts commercially reasonable for Tenant's Permitted Use. Subject to Landlord's prior written approval, not to be unreasonably withheld, Schedule 5.1.14 may be updated by Tenant from time to time during the Term. Tenant shall not use, store, handle, treat, transport, release, or dispose of any other Hazardous Materials (other than as listed on Schedule 5.1.14, as the same may be updated from time to time as provided in the preceding sentence) on or about the Premises or the Building or Land without Landlord's prior written consent, which Landlord may withhold or condition in Landlord's sole discretion. Any handling, treatment,

transportation, storage, disposal, or use of Hazardous Materials by Tenant in or about the Premises, the Building, or the Land, shall comply with Landlord's procedures and all applicable Legal Requirements. Tenant shall, within ten Business Days of Landlord's written request therefore, disclose in writing all Hazardous Materials that are being used by Tenant in the Premises, the nature of such use, and the manner of storage and disposal. Tenant has a duty at its cost to correct any practice and remediate any condition occurring in the Premises after the Lease Commencement Date that is in violation of Environmental Laws, except where caused by negligence or willful misconduct of Landlord, its employees, agents, contractors or invitees.

(b) Tenant shall indemnify, defend with counsel reasonably acceptable to Landlord, and hold Landlord harmless from and against, any liabilities, losses, claims, damages, interest, penalties, fines, reasonable attorney's fees, investigation and remediation costs, and other costs that result from the use, storage, handling, treatment, transportation, release, threat of release or disposal of Hazardous Materials in or about the Premises, the Building, or the Land in violation of the Environmental Law by Tenant or Tenant's agents, employees, contractors, or invitees, except to the extent caused by any act or omission of Landlord, its agents, employees, contractors, or invitees and the provisions of this sentence shall survive the expiration or earlier termination of this Lease for the longest period permitted by law.

(c) Tenant shall immediately notify Landlord whenever Tenant discovers that there has been a release, threat of release, or spill of Hazardous Materials in or about the Premises, the Building, or the Land or the occurrence of a violation of Environmental Laws. Tenant shall give notice to Landlord as soon as reasonably practicable of any communication received by Tenant from any Governmental Authority concerning Hazardous Materials that relates to the Premises, the Building, or the Land.

(d) Without imposing any duty on Landlord, Landlord reserves the right to inspect (and cause its representatives and consultants to inspect) from time to time the Premises to determine the existence of any release or threat of release of Hazardous Material in or about the Premises, the Building, or the Land and Tenant's compliance with Environmental Laws. Tenant will cooperate with Landlord (and Landlord's representatives and consultants) in connection with the inspection, and will pay for the cost of the inspection if the inspection reveals any (i) reportable spills, releases, or threats of release as a result of Tenant's use and occupancy of the Premises or otherwise caused by Tenant or its agents, employees, contractors, or invitees or (ii) violations of an Environmental Law (whether or not required to be reported by an Environmental Law) occurring as a result of Tenant's use and occupancy of the Premises or otherwise occurring within the Premises or otherwise caused by Tenant or its agents, employees, contractors, or invitees, that were not previously disclosed by Tenant to Landlord.

5.1.15 Glass. Damage by casualty excepted, Tenant shall keep all glass of the Premises, if any, including that in windows, doors, and skylights, whole and in good condition, and shall replace promptly any glass that may be damaged or broken with glass of equal or better quality.

5.1.16 No Interference. Tenant shall not permit employment of any contractor, worker, or tradesperson in the Premises, if such employment will likely interfere, or cause any conflict, with other contractors, workers, or tradespersons engaged in work in the Building or on the Land, and upon the request of Landlord, Tenant shall cause all such contractors, workers, and tradespersons to leave the Building and Land immediately. Tenant shall submit a list of its proposed contractors and tradespersons to Landlord for Landlord's prior approval, which approval shall not be unreasonably withheld, conditioned or delayed.

5.1.17 Energy Conservation. Tenant shall comply with, such reasonable policies, programs, and measures that are instituted by Landlord, as may be necessary, required, or expedient for the conservation or preservation of energy or energy services, or as may be necessary or required to comply with applicable Legal Requirements.

ARTICLE 6.0 TENANT'S DEFAULT.

Section 6.1 Event of Default; Termination. The occurrence of any of the following shall constitute an "**Event of Default**" under this Lease:

(a) Tenant fails to pay to Landlord, within five (5) Business Days after receipt of Landlord's notice thereof, any payment of Rent or any other payment required by this Lease to be paid to Landlord, provided however, that Landlord shall not be required to give more than two (2) of such notices in any twelve month period, and thereafter, during such twelve month period, any such Breach shall be an Event of Default without the giving of any such notice.

(b) Tenant fails to maintain the insurance that this Lease requires Tenant to maintain; or uses the Premises for uses other than the Permitted Uses.

(c) This Lease or the estate hereby granted or the unexpired balance of the Lease Term is by operation of law or otherwise, transferred to, devolves upon, or passes to any person other than Tenant except as is expressly permitted by provisions of Section 9.13.

(d) There occurs an Event of Default as expressly specified in other Articles of this Lease, provided however, that the cure period set forth in subsection (f) below (or such shorter period as is set forth in the respective Articles of this Lease) shall apply in each case before an Event of Default is deemed to have occurred.

(e) A petition or proceeding is filed against Tenant by others or is filed by Tenant, or an order for relief is entered with respect to Tenant, under any provision of the Bankruptcy Code or an assignment is made of Tenant's property for the benefit of creditors or if a receiver, guardian, conservator, or similar officer is appointed to take charge of all or any part of Tenant's property by a court of competent jurisdiction; unless, except with respect to any such petition or proceeding filed, or order for relief sought, by Tenant, such petition or proceeding or action is dismissed within sixty (60) days after commencement of any such petition, proceeding or action.

(f) Any other Breach of this Lease, if such Breach occurs and continue for thirty (30) days after notice of such Breach is given to Tenant, or such longer period (not to exceed one hundred eighty (180) days) as is reasonably required for cure so long as Tenant commences such cure within thirty (30) days and thereafter diligently prosecutes the correction to completion.

6.1.1 Notice of Termination. If an Event of Default occurs, Landlord may immediately or at any time thereafter terminate this Lease by notice of termination (or notice to quit) to Tenant, without prejudice to any remedies (whether set forth in this Lease or provided for by law or equity) that might otherwise be used for arrearage of rent, for nonpayment of amounts required to be paid by Tenant to Landlord under this Lease, or for preceding breaches of covenant, and upon the giving of such notice of termination (or notice to quit), this Lease shall terminate.

Section 6.2 Tenant's Duties After Termination. Tenant shall, in case of a termination of this Lease, pay and perform all of the duties described in (a), (b), and (c) below, and Landlord has the right to elect to receive from Tenant either the Fixed Damages, or alternatively, the Incurred Loss; but if Landlord elects to receive the Incurred Loss payments, Landlord has the right at any time thereafter during the Lease Term to elect to receive instead Fixed Damages with respect to the remainder of the Lease Term, and in any event Landlord may elect that Tenant quit the Premises. Landlord shall give Tenant notice of Landlord's election within one year after the termination of this Lease. As used in this Section 6.2, "the Lease Term" or "the remainder of the Lease Term" shall mean that period of time commencing on the effective date of the termination of this Lease and ending on what would have been the Lease Expiration Date (as such date was extended by any valid exercise by Tenant of any extension option in this Lease) had this Lease not been so terminated.

(a) Fixed Damages. If Landlord by notice to Tenant so elects, Tenant shall forthwith pay to Landlord as damages ("**Fixed Damages**") a sum equal to the amount (calculated on a present value basis using the Prime Rate as the discount rate) by which the Basic Rent and other payments called for in this Lease for the remainder of the Lease Term exceed the fair rental value of the Premises for the remainder of the Lease Term.

(b) Incurred Loss. If Landlord by notice to Tenant so elects, Tenant shall continue to pay Landlord on the Rent Payment Day an amount (the "**Incurred Loss**") equal to (i) the Rent and other payments required to be paid under this Lease less (ii) the sum of any rent collected from Landlord's reletting less the Reletting Expenses. The "**Reletting Expenses**" shall include reasonable attorney's fees, brokerage fees, and the cost of putting the Premises into good order and preparing the Premises for rental. Tenant shall indemnify Landlord during the remainder of the Lease Term against all Incurred Loss suffered and expenses, however caused, incurred by Landlord by reason of the termination of this Lease. The Incurred Loss occurring during each calendar month during the remainder of the Lease Term shall be due from Tenant to Landlord on the next Rent Payment Day.

(c) Surrender of Premises. If Landlord gives notice to Tenant electing that Tenant quit the Premises, then Tenant shall quit and peacefully surrender the Premises to Landlord and remove Tenant's goods and effects and yield up the Premises in accordance with Section 9.24.1 within ten Business Days after the effective date of the termination of this Lease, and if Tenant fails to do so, Landlord may upon or at any time after any such termination, without further notice and without prejudice to any other rights and remedies that Landlord may have at law or in equity, (1) enter the Premises and possess itself thereof, by summary proceedings or otherwise, (2) dispossess Tenant and remove Tenant and all other persons and property from the Premises, and (3) have, hold, and enjoy (i) the Premises and (ii) the right to receive all rental income of and from the same; but, notwithstanding the foregoing (1), (2), and (3), Tenant shall remain liable to Landlord as provided in this Lease.

6.2.1 Evidence of Value. If the Premises or any part thereof are relet by Landlord prior to presentation of proof of liquidated damages to the applicable court or tribunal, the amount of rent reserved upon such reletting may be asserted by Landlord as prima facie evidence of the fair rental value for the part or the whole of the Premises so relet during the term of the reletting.

Section 6.3 Landlord's Right to Relet From time to time after any termination of this Lease or Landlord's re-entry pursuant to this Article 6.0 of the Lease, Landlord may relet the Premises or any part thereof, in the name of Landlord or otherwise, for such lease term(s) and on such conditions (which may include concessions or free rent) as Landlord may in its sole discretion elect, and Landlord may collect and receive the rents therefor. Landlord will not be liable for any failure to relet the Premises or any part thereof, or for any failure to collect any rent due upon any such reletting.

Section 6.4 Landlord's Other Remedies Nothing herein contained shall limit or prejudice the right of Landlord to prove and obtain as damages by reason of such termination, an amount equal to the maximum allowed by any statute or rule of law in effect at the time when, and governing the proceedings in which, such damages are to be proved, whether or not such amount be greater, equal to, or less than the amount of the difference referred to above.

Section 6.5 Right to Equitable Relief Landlord is entitled to enjoin a Breach and has the right to invoke any right and remedy allowed at law or in equity or by statute or otherwise as though re-entry, summary proceedings, and other remedies were not provided for in this Lease.

Section 6.6 Landlord's Right To Cure Tenant's Breach. If a Breach occurs, Landlord shall have the right, but not the duty, to enter upon the Premises, if necessary, and to cure such Breach, provided that Tenant is given an opportunity to cure such Breach as set forth in this Lease. In performing such cure, Landlord may make any payment of money or perform any other act. Landlord may, in the event of danger to person or property, the threat of cancellation of insurance, or other emergency, exercise its right of self-help under this Section with only such notice of the Breach, oral or written, as is practicable in the circumstances, notwithstanding a requirement, if any, for notice of a Breach or default in any other context. The aggregate of (i) all sums so paid by Landlord (including reasonable attorney's fees), (ii) interest (at the Involuntary Rate) on such sum,

and (iii) all necessary incidental costs (including reasonable attorney's fees) in connection with the performance of any such act by Landlord, shall be deemed to be Additional Rent. Landlord may exercise the foregoing rights without waiving any other of its rights or releasing Tenant from any of Tenant's duties under this Lease.

Section 6.7 Enforcement Costs. Tenant shall pay as Additional Rent Landlord's costs (including reasonable attorney's fees) incurred in enforcing or demanding enforcement of any of Tenant's duties hereunder. In the event either party initiates legal proceedings against the other, the prevailing party shall be entitled to recover reasonable legal fees and court costs in connection with such proceeding.

ARTICLE 7.0 LANDLORD'S DEFAULT.

Section 7.1 Landlord's Default. Landlord shall be deemed to be in default under this Lease if Tenant has given written notice (or verbal notice, in case of emergency, followed by written notice as soon as is practicable under the circumstances) to Landlord (and, if requested by Landlord, to Landlord's mortgagee if the mortgagee has notified Tenant in writing of its interest and the address to which such notices are to be sent) of any such default by Landlord and Landlord has failed to cure such default within thirty (30) days (or with reasonable promptness, in case of emergency) after Landlord received notice thereof. Provided, however, that if the nature of Landlord's default in a non-emergency situation is such that more than thirty (30) days are reasonably required for a cure, then Landlord shall not be deemed to be in default if Landlord commences such cure within the original thirty (30) day period and thereafter diligently prosecutes the cure to completion. Tenant shall be entitled to a fair and reasonable abatement of Rent during the time and to the extent that the Premises are untenantable as a result of Landlord's failure to perform any condition or covenant required under the Lease to be performed by Landlord. The failure of Tenant to pursue any remedy shall not be deemed as a waiver by reason of any subsequent breach or breaches by the Landlord. The exercise of any remedy by Tenant shall not be deemed an election of remedies or preclude Tenant from exercising any other remedies in the future.

ARTICLE 8.0 SECURITY.

Section 8.1 Security Deposit; Amount, Form. Simultaneously with the execution of this Lease, Tenant shall deliver to and deposit with Landlord a security deposit ("**Security Deposit**") in the amount indicated below.

Security Deposit: $5,800.00

Landlord shall keep the Security Deposit throughout the Lease Term and for sixty days after (i) the Lease Expiration Date of the Lease Term or (ii) the earlier termination of the Lease Term, except that if such earlier termination is based on an Event of Default, Landlord shall retain (or use, as

applicable) the Security Deposit until sixty days after the date when the Lease Term would have expired had it not been earlier terminated. Landlord has no duty to keep segregated the Security Deposit and no duty to pay interest on it.

Section 8.2 Use of Security Deposit Upon a Breach or Event of Default If, and as soon as, there shall exist a Breach under this Lease beyond the applicable notice and cure periods, Landlord may draw upon the Security Deposit at any time and from time to time in such amount or amounts as may be necessary to cure the Breach or to reimburse Landlord for any sum(s) that Landlord may have spent to cure the Breach(es), and if Landlord has terminated this Lease for an Event of Default, then Landlord may also draw upon the Security Deposit in such amount (or all) as may be necessary to obtain any amounts from time to time owed to Landlord by Tenant after termination under Article 6.0 or otherwise. In the case of each such drawing (except a drawing occurring after termination or expiration of this Lease), Tenant shall, on demand, cause the Security Deposit to be reinstated to the full amount specified in Section 1.1. If no Breach exists and continuing beyond the applicable cure periods at the end of this Lease, then the Security Deposit, or any balance thereof, shall be returned to Tenant within thirty days after this Lease ends, but not otherwise. If a Breach exists at the end of this Lease, then Landlord shall have the right to draw upon the Security Deposit in the amount as Landlord determines to be necessary to cure such Breach or to compensate Landlord for the occurrence thereof, and the balance (if any) shall be returned to Tenant. If an Event of Default exists at the end of this Lease, then Landlord shall have the right to draw on all of the Security Deposit and hold it to be applied from time to time against Fixed Damages and Incurred Losses (as described in Section 6.2).

ARTICLE 9.0 GENERAL MATTERS.

Section 9.1 Broker. Tenant and Landlord warrant and represent to each other that they have not dealt with any broker, finder, or similar person other than the Broker, if any, named in Article 1.0, in connection with this transaction or in connection with this Lease. Tenant and Landlord will defend, indemnify, and hold each other harmless against all loss and costs incurred by the other party as a result of the failure of this warranty and representation.

Section 9.2 Notices. Unless otherwise specified herein, any notice or demand to be given hereunder shall be in writing and signed by the party or the party's attorney and shall be deemed to have been given

(a) when delivered, if delivered by hand;

(b) two Business Days after the date mailed, if mailed by registered or certified mail, all charges prepaid; or

(c) when delivered or first tendered for delivery (whichever is earlier), if sent for delivery by a nationally recognized courier such as FedEx or UPS,

in either event, addressed as follows:

if to Landlord, at Landlord's address as follows:

Harvard Real Estate – Allston, Inc.
c/o Harvard Real Estate Services
1350 Massachusetts Avenue
Holyoke Center, Suite 800
Cambridge, Massachusetts 02138-3826

with a copy to Landlord's attorney:

Office of the General Counsel
Harvard University
1350 Massachusetts Avenue
Holyoke Center, Suite 980
Cambridge, Massachusetts 02138-3834

or if to Tenant, at Tenant's Mailing Address set forth in Article 1.0. By such notice, either party or such party's attorney may specify a new address, which thereafter shall be used for subsequent notices. Any mailed notice by certified or registered mail shall be deemed mailed on the date of postmark of the mailing of the same.

Section 9.3 Condition of Premises, No Representations. EXCEPT AS SPECIFICALLY PROVIDED HEREIN, TENANT IS TAKING THE PREMISES "AS IS," AND LANDLORD DISCLAIMS ANY WARRANTY OF SUITABILITY OF THE PREMISES FOR USE BY TENANT. Landlord makes no representation or warranty, express or implied, as to the condition of the Premises, the fitness of the Premises for any particular use, the exact floor area of the Premises (whether in rentable square feet, usable square feet, or some other measure), whether or not the Permitted Uses require any governmental permits or approvals or comply with Legal Requirements, or the likelihood or ability of Tenant to obtain any required permits or approvals.

Section 9.4 Harvard Name. Unless Landlord gives its prior written consent in each instance, Tenant shall not (i) use the word "Harvard" (whether alone or in combination with other words, except that the combination "Harvard Square" is permitted), (ii) display or otherwise use the name, emblem, or logo (or any similar name, emblem, or logo) of any school, department, or other component, constituent, or affiliate of Landlord (collectively, "Harvard Name"), (iii) otherwise refer to Landlord or any school, department, or other component or affiliate of Landlord, whether in or on any sign, advertisement (including any newspaper, television, or radio advertisement), commercial announcement, circular, flier, or other publication, or (iv) stock in or sell from the Premises merchandise bearing the Harvard Name. Landlord will have the right to enforce the foregoing provision in judicial proceedings by a decree of specific performance and appropriate injunctive relief as may be applied for and granted in connection with such enforcement.

Section 9.5 Casualty and Eminent Domain.

9.5.1 Casualty, Partial Taking During the Lease Term, if all or any portion of the Building, the Land, or the Premises are either (i) damaged by fire or other cause ("**Casualty Event**") or (ii) taken or condemned in any eminent domain, condemnation, compulsory acquisition, or like proceeding by any Governmental Authority or conveyed under the threat thereof, for any public or quasi public use or purpose ("**Taking**"), then this Lease shall terminate sixty days after such Casualty Event or on the effective date of the Taking ("**Taking Event**"), unless Landlord gives Tenant notice before such date that this Lease is not terminated because in Landlord's reasonable opinion,

(a) in the case of a Casualty Event, less than twenty-five percent of the Premises and less than twenty-five percent of the Land and the Building are damaged by the Casualty Event, and the Building has not been damaged by fire or other cause to the extent that substantial alteration or reconstruction of the Building shall be required (whether or not the Premises shall have been damaged); and the access to, and occupancy of the Premises has not been affected such that Tenant may resume its operations at the Premises without material interference or interruption, or

(b) in the case of a Taking, the Taking does not prevent convenient access to and use of the Premises and the Building.

Whether or not Landlord elects to terminate this Lease, Landlord shall be entitled to receive directly from the insurer (or the Taking authority) all insurance proceeds (or Taking proceeds) resulting from or related to the Casualty Event (or the Taking), except for those expressly allocated to Tenant by the Taking authority. In the event the Lease is not terminated as set forth above, the Rent shall be proportionately abated with respect to that portion of the Premises so taken.

9.5.2 Total Taking. If the entire Premises are ever the subject of a Taking, this Lease shall terminate and the effective date of termination shall be the earlier to occur of (i) the date when physical possession of the Premises is taken by the Taking authority or (ii) the date that in Landlord's opinion, Tenant's use and occupancy of the Premises is legally prohibited by final action of the Taking authority.

9.5.3 Restoration, Tenant's Right to Terminate. If this Lease is not terminated under Section 9.5.1 or Section 9.5.2, Landlord shall use due diligence to restore the Premises using the proceeds of insurance covering the Premises (or, in case of partial Taking, what may remain of the Premises using compensation awarded to Landlord by the Taking authority), excluding Tenant FETI, to proper condition for use and occupation; provided, however, that if Landlord has not restored the Premises within nine (9) months from the Casualty Event or Taking Event, Tenant shall have the right to terminate this Lease by notice given to Landlord after the expiration of such nine (9) month period, which termination shall be effective thirty days after Tenant gives its notice of termination unless Landlord substantially completes the work before the end of such thirty-day period, in which case Tenant's notice of termination shall be void. From and after the Casualty Event or Taking Event, and during such restoration, a just proportion of the Rent as determined by

Landlord (considering the nature and extent of the damage or Taking), shall be abated. In the event of a Taking, if less than all of the Premises are restored, a just proportion of the Rent, similarly determined by Landlord, shall be abated for the remainder of the Lease Term. Landlord shall not be liable for any inconvenience or annoyance to Tenant or effects on the business of Tenant resulting in any way from such Casualty Event or Taking or the repair or restoration thereof. Landlord's duties hereunder to restore shall be subject to (i) Landlord's ability to obtain Authorizations, (ii) Landlord's ability to obtain materials or to install the same, and (iii) strikes, labor difficulties, shortages of labor, or any cause beyond Landlord's reasonable control. Landlord will not be required to spend an amount to restore the portion of the Premises affected by the casualty or Taking in excess of the amount (after deducting the costs of collection (including reasonable attorney's fees)) of the insurance proceeds and Taking proceeds received by Landlord and allocable thereto, and if, within thirty days after Landlord receives the proceeds, Landlord determines that such proceeds will be insufficient, Landlord may terminate this Lease by giving thirty days notice of such termination to Tenant.

9.5.4 Landlord's Right to Damages. Landlord reserves, and Tenant hereby releases and grants to Landlord, all rights to damages arising from any Taking except for damages expressly allocated by the Taking authority to Tenant. Tenant reserves its right to seek a separate award from the Taking authority for Tenant's loss and relocation expenses, if there should be any.

Section 9.6 Indemnification.

(a) To the fullest extent permitted by law, Tenant shall defend (at its own cost and with counsel reasonably approved by Landlord), save harmless, and indemnify Landlord (its members, mortgagees, ground lessors, agents, officers, directors, members, employees, and members of its governing boards:

(i) from and against all liability and claims of whatever nature

(1) arising from or related to the omission, fault, act, negligence, misconduct, or default (whether under this Lease or otherwise) of Tenant or of any subtenant, concessionaire, employee, agent, contractor, licensee, or visitor of Tenant; or

(2) arising from any accident, injury, or damage whatsoever resulting to any person or property while on or about the Premises (except to the extent arising from any omission, fault, negligence, or other misconduct of Landlord, its agents, officers, directors, members, employees or contractors); or

(3) arising from any violation by Tenant or any subtenant, concessionaire, employee, agent, contractor, licensee, or visitor of Tenant, of Legal Requirements including any law, regulation, or ordinance concerning trash, hazardous materials, or other pollutant

occurring on or after the date that possession of the Premises is delivered to Tenant, or arising from any accident, injury or damage occurring outside of the Premises but in the Building or on the Land, where such accident, damage, or injury results or is claimed to have resulted from an act or omission on the part of Tenant or Tenant's employees, agents, contractors, licensees, or visitors, and

(ii) from and against any liability, actions, proceedings, and judgments arising in connection with the matters described in (i) above, including costs (including reasonable attorney's fees) related thereto, and including any claim of an employee of Tenant (including the subrogated claim) who is covered (or who should have been covered) in whole or in part by worker's compensation, arising in connection with the matters described in (i) above.

(b) The covenants and agreements set forth in this Section 9.6 shall continue in full force and effect for the longest period of time permitted by law, notwithstanding the expiration or termination of this Lease.

Section 9.7 Insurance.

9.7.1 Types. Tenant shall maintain at all times during the Lease Term, with respect to the Premises and Tenant's property therein, a fully-paid commercial general liability insurance policy written on an occurrence basis, with a so-called "broadening endorsement" (or in the so-called "broad form") insuring contractual liability, bodily injury (including death), personal injury, products liability (and, if applicable, garage keepers liability, inn keepers liability, liquor liability, fire legal liability, and, if there is an elevator in the Building, elevator liability), with an endorsement deleting the "care, custody, and control" exclusion and with a combined single limit equal to the Minimum Liability Insurance Coverage (with an annual aggregate limit greater than three times the Minimum Liability Insurance Coverage) with respect to bodily injury, personal injury, and property damage.

9.7.1.1 Multiple Locations. If Tenant conducts business at locations other than the Premises, the insurance policy shall contain an endorsement that the aggregate limit in the policy shall apply to the Premises without regard to Tenant's other locations.

9.7.2 General Description. Each such policy (and any so-called "umbrella policy" carried by Tenant) shall name Landlord (and at Landlord's request, Landlord's third-party managing agent, mortgagee, and ground lessor, as their respective interests may appear) as an additional insured(s) and shall be issued by companies licensed to offer insurance in Massachusetts having current A.M. Best and Company ratings of A or better and financial size rating of class IX or higher, have deductibles satisfactory to Landlord, and be otherwise reasonably satisfactory to Landlord, and with respect to Landlord shall be non-cancelable and not subject to modification without thirty days' prior notice to Landlord by registered or certified mail return receipt requested at the same address as herein provided for notices from Tenant to Landlord. Notwithstanding the foregoing, Landlord hereby acknowledges that as of the date hereof, Federal Insurance Company and Affiliated Fire and

Marine Insurance Company meet the above requirements. All insurance policies carried by Tenant covering the Premises shall include an endorsement expressly waiving any right on the part of the insurer against Landlord by subrogation or otherwise. Tenant shall deliver to Landlord, before the Lease Commencement Date and before the commencement of each Lease Year but in any event at least thirty days before the expiration date of any existing policy (and before each renewal thereof), a certificate of insurance for each policy describing the insurance that will be in effect for such Lease Year, and if Tenant fails to do so, Landlord, without thereby waiving or limiting any other right or remedy that Landlord may have, shall have the right but not the duty to obtain insurance for Tenant and the cost of obtaining such insurance and the premiums therefor shall be deemed Additional Rent. The minimum limits of such insurance policies shall be increased as Landlord may reasonably request from time to time. Upon Landlord's request, Tenant shall require Tenant's insurance company to explain to Landlord in writing the nature and extent of the coverage and the exclusions, if any, provided by such policy or policies.

9.7.3 Failure to Obtain Insurance; Non-liability. Landlord shall not be liable to Tenant for any claims that would have been covered if Tenant obtained the insurance required under this Lease, regardless of whether such claim or damage is caused wholly or partially by Landlord or its agents, employees, tenants, subtenants, licensees, or assignees. Except to the extent arising from any omission, fault, negligence, or other misconduct of Landlord or its agents, employees, tenants or contractors, neither Landlord nor any of its affiliated or subsidiary corporations, nor their respective agents, officers, members of governing boards, or employees shall be liable to Tenant or Tenant's agents, officers, directors, shareholders, partners, members, managers, principals, invitees, contractors, licensees, trespassers, or persons occupying or using the Premises, or persons claiming by or through any of same, for injury, loss, or damage to person or property (including Tenant's tenant improvements, betterments, fixtures, equipment, appliances, personal property, and the like), resulting from any accident or occurrence in or upon the Premises, the Land, or the Building, including those resulting from: (1) any equipment or appurtenances becoming out of repair; (2) injury done or occasioned by wind; (3) any defect in or failure of plumbing, heating, or air conditioning equipment, electric wiring or insulation thereof, gas, water, and steam pipes, stairs, railings, or walks; (4) broken glass; (5) any interruption of utility service(s); (6) the bursting, stopping, backing up, leaking, or running of any water, gas, sprinkler, steam, or sewer pipe, in, upon, or about the Building or the Premises; (7) the escape of steam or hot water; (8) water, snow, or ice being upon or coming through the roof, skylight, trapdoor, stairs, doorways, show windows, walks, or any other place upon or near the Building or the Premises or otherwise; (9) the falling of any fixture, plaster, tile, or stucco; and (10) any act, omission, or negligence of co-tenants, licensees, or of any other persons or occupants of the Building or of adjacent or contiguous buildings or of owners, lessees, or occupants of adjacent or contiguous property, or of persons on or about the Premises; and Tenant hereby releases Landlord from such liability. None of the above items (1) through (10) are duties of Landlord. If any property of Tenant is entrusted to Landlord or Landlord's agent, such person shall be deemed to be acting as Tenant's agent.

9.7.4 Additional Policy Requirements. All insurance policies procured by Tenant under this Section 9.7 shall contain an endorsement that each landlord, superior owner, and superior mortgagee, although named as an additional insured, nevertheless shall be entitled to recover under

said policies for any loss or damage to it occasioned by its agents, employees, contractors, directors, shareholders, partners, members, managers and principals (disclosed and undisclosed) by reason of the negligence of Landlord or Tenant, or their respective servants, agents, employees and contractors.

9.7.5 Landlord's Insurance. Landlord agrees to maintain in full force and effect throughout the Lease Term (a) commercial general liability coverage with respect to the Land and the Building, and the conduct and operation of its business therein, with combined base and umbrella coverage limits of not less than One Million Dollars ($1,000,000.00) for bodily injury or death and property damage in any one occurrence and not less than Two Million Dollars ($2,000,000.00) in the aggregate; and (b) commercial property insurance with a special form endorsement providing coverage on a full replacement cost basis with respect to Structural Components, but excluding Tenant FETI, Tenant's Work and any alterations made by Tenant. Landlord will not carry any insurance whatsoever on Tenant FETI, or Tenant's Work and shall not be obligated to repair any damage thereto or to replace the same. Landlord shall have the right to provide any insurance required to be maintained hereunder by it under blanket policies or under a commercially reasonable program of self-insurance. All insurance policies carried by Landlord covering the Building shall include an endorsement expressly waiving any right on the part of the insurer against Tenant by subrogation or otherwise; provided, however, in the event any such damage to the Building covered by such policies of insurance carried by Landlord is due to the negligence, recklessness or willful misconduct of Tenant, Tenant shall pay to Landlord, as Additional Rent, the amount of any reasonable deductible payable by Landlord under such policy.

9.7.6 Personalty. Tenant is solely responsible to obtain insurance insuring Tenant's personal property, and failure to do so or failure of such insurance policy to cover the claim shall be deemed a waiver of any claim against Landlord, superior owner, or mortgagee, for any damage or loss to such Tenant's property, except to the extent arising from any omission, fault, negligence, or other misconduct of Landlord.

Section 9.8 Interruption in Services and Utilities, Selection of Power Providers.

9.8.1. To the extent not expressly prohibited by law, Landlord shall not be liable to Tenant or Tenant's employees, contractors, agents, invitees or customers, for any injury to person or damage to property sustained by Tenant or any such party or any other person claiming through Tenant resulting from any accident or occurrence in the Premises or any other portion of the Building caused by the Premises or any other portion of the Building becoming out of repair or by defect in or failure of equipment, pipes, or wiring, or by broken glass, or by the backing up of drains, or by gas, water, steam, electricity, or oil leaking, escaping or flowing into the Premises (except where due to Landlord's grossly negligent or willful failure to make repairs required to be made pursuant to other provisions of this Lease, after the expiration of a reasonable time after written notice to Landlord of the need for such repairs), nor shall Landlord be liable to Tenant for any loss or damage that may be occasioned by or through the acts or omissions of other tenants of the Building or of any other persons whomsoever, including, but not limited to riot, strike, insurrection, war, court order, requisition, order

of any governmental body or authority, acts of God, fire or theft. Notwithstanding the foregoing or any other provision of this Lease to the contrary, if the Premises or any material portion thereof shall become untenantable by reason of (i) an interruption in utility service to the Premises resulting from the willful or negligent act or omission of Landlord, its agents, contractors or employees; (ii) the failure of Landlord to provide any service to the Premises required to be provided by Landlord under this Lease (other than failures to provide utility services to the Building by the respective service providers); or (iii) the performance of any work in the Premises or the Building, except to the extent the necessity for same results from the negligence of Tenant, its agents, contractors, or employees or the failure of Tenant to perform its obligations under this Lease, which untenantability, in any such case, continues for more than five (5) consecutive Business Days after Tenant notifies Landlord in writing thereof, then, as Tenant's sole remedy therefor, Basic Rent shall equitably abate in proportion to the portion of the Premises that is untenantable from the date of such notice to Landlord until Landlord corrects the condition causing such untenantability. Tenant shall have the right to terminate this Lease if (a) any such interruption in the utilities or services continues for thirty (30) consecutive days and (b) the interruption was the result of the gross negligence or willful misconduct of Landlord or its agents, contractors or employees.

9.8.2 Landlord has no duty to allow any particular telecommunication service provider to have access to the Building or to the Premises, and if Landlord, in its reasonable discretion permits such access, Landlord may condition such access upon the payment to Landlord by the service provider of one-time or recurring fees assessed by Landlord in such amounts as Landlord may reasonably determine, and, in addition, the service provider shall reimburse Landlord for any costs incurred by Landlord in connection with allowing such access.

Section 9.9 No Jury Trial. To the extent permitted by law, the parties hereto waive a trial by jury on any or all issues arising in any action or proceeding between them or their successors under or connected with this Lease or any of its provisions, any negotiations in connection therewith.

Section 9.10 Sale of Premises Landlord shall have the right to transfer and assign, in whole or in part, all of its rights and obligations hereunder and in the Building and Land, and in such event and upon such transfer Landlord shall be released from any further obligations hereunder, and Tenant agrees to look solely to such successor in interest of Landlord for the performance of such obligations.

Section 9.11 Effect of Unavoidable Delays; Force Majeure If either party to this Lease, as the result of any (i) strikes, lockouts, or labor disputes; (ii) inability to obtain labor or materials, or reasonable substitutes therefor; (iii) acts of God, governmental action, condemnation, civil commotion, fire, or other casualty, (iv) trouble in obtaining fuel, electricity, water, sewer, or telecommunication services or supplies from sources from which they are usually obtained for the Building; (v) acts of terrorism, or (vi) other conditions similar to those enumerated in this Section beyond the reasonable control of the party who has the duty to perform (collectively, "**Force Majeure**"), fails to perform punctually any duty on its part to be performed under this Lease, then such delay shall be excused and not be a breach of this Lease by the party in question, but only to the extent occasioned by such event; *provided*, *however*, that the party experiencing such Force

Majeure event or condition (a) notifies the other party promptly after becoming aware of such event or condition (including in such notice an estimate of the duration of such delay), and (b) continues to make diligent efforts to minimize the delay in performance caused by such Force Majeure event or condition. If any right or option of either party to take any action under or with respect to this Lease is conditioned upon the same being exercised within any prescribed period of time or at or before a named date then such prescribed period of time and such named date shall be deemed to be extended or delayed, as the case may be, for a period equal to the period of the delay occasioned by any event described above. The provisions of this Section shall not be applicable to Tenant's duty to pay Rent, or Tenant's duties to pay any other sums, monies, costs, charges, or expenses required to be paid by Tenant under this Lease.

Section 9.12 Intentionally Omitted

Section 9.13 Assignment or Subletting As used in this Lease "**Subletting**" includes transactions creating or resulting in one or more subleases, tenancies-at-will, licenses, concessions, or other occupancy arrangements, and the term "**Subtenant**" refers to the person who holds a portion of the Premises pursuant to the Subletting. Tenant shall not engage in, or permit the assignment, transfer, mortgage, alienation, or pledge (collectively "**Assignment**") of this Lease or any interest therein, nor engage in or permit any Subletting of all or any part of the Premises, nor suffer any of the foregoing to occur without the prior written consent of Landlord, such consent not to be unreasonably withheld, conditioned or delayed. Without limitation, it is agreed that Landlord's consent shall not be considered unreasonably withheld or conditioned if: (1) the proposed transferee's financial condition is not adequate for the obligations such transferee is assuming in connection with the proposed Assignment, provided, however, Landlord shall not be permitted to withhold its consent to such Assignment or Subletting based solely on such transferee's financial condition, but Landlord may require that the Security Deposit be increased to an amount equal to three (3) month's Basic Rent; (2) the transferee's business or reputation is not suitable for the Building considering the business and reputation of Landlord and the other tenants and the Building's prestige, or would result in a violation of another tenant's rights under its lease at the Building; (3) the transferee is a governmental agency; (4) an Event of Default by Tenant occurred under this Lease; or (5) any portion of the Building or the Premises would likely become subject to additional or different laws or permitting requirements as a consequence of the proposed Assignment.

The foregoing prohibition against Assignment and Subletting shall include voluntary and involuntary Assignment and Subletting, and Assignment and Subletting by operation of law, including corporate mergers or consolidations, the entering into of any management agreement or any agreement in the nature thereof transferring control or any substantial percentage of the profits and losses from the business operations of Tenant in the Premises to a person or entity other than Tenant, or otherwise having substantially the same effect. If Tenant is a corporation, partnership, or limited liability company, and if at any time during the Lease Term there shall occur either (i) the issuance of interests in Tenant (whether stock, partnership, or membership interest, or otherwise) to any person or group of related persons, or entity or group of related entities, whether in a single

transaction or a series of related or unrelated transactions, in such quantities that after such issuance such person, entity, or group shall have control of Tenant, or (ii) a transfer of more than 50% in interest, of Tenant (whether stock, partnership or membership interest, or otherwise) by any party or parties in interest whether in a single transaction or a series of related or unrelated transactions or by operation of law, the same shall be deemed an Assignment of this Lease, except that the transfer of the outstanding capital stock of any corporate Tenant, by persons or parties (other than persons or parties owning 5% or more of the voting stock of such corporation) through the "over-the-counter" market or any recognized national securities exchange, shall not be included in the calculation of such 50%. In the event an issuance or transfer referred to in clause (i) or (ii) of the second sentence of this grammatical paragraph shall occur (except with respect to a Permitted Transfer), Tenant shall so notify Landlord and Landlord shall have the right, at its option, to terminate this Lease by notice to Tenant given within thirty days thereafter or within ninety days after Landlord shall have received other notice thereof. Any attempted Assignment or Subletting in violation of any of the provisions of this Lease shall be void. No Assignment or Subletting shall in any way impair the continuing primary liability of Tenant hereunder (which after any such Assignment or Subletting shall be joint and several with the persons claiming under the Assignment or Subletting).

9.13.1 Notwithstanding the foregoing, Landlord's consent shall not be required to an Assignment to any entity into or with which Tenant is merged or that acquires substantially all of the equity interests in and to Tenant or substantially all of the assets of Tenant, provided that (i) as of the effective date of such Assignment such entity has a net worth at least equal to the net worth of Tenant as of the date of this Lease (as evidenced by financial statements and other evidence as reasonably required by Landlord), and (ii) such entity enters into an agreement with Landlord, in form and substance reasonably satisfactory to Landlord, whereby such entity assumes all of Tenant's obligations under this Lease (a "**Permitted Transfer**").

9.13.2 Except in case of a Permitted Transfer, Landlord has no duty to entertain or consider any request by Tenant to consent to any proposed Assignment of this Lease or Subletting of all or any part of the Premises unless each such request by Tenant is accompanied by a nonrefundable fee payable to Landlord in the amount of $500.00 to cover Landlord's administrative and reasonable attorney's fees incurred in the processing of each such request by Tenant. In addition, such nonrefundable fee shall be payable to Landlord in connection with the processing of a Permitted Transfer. However, neither Tenant's payment nor Landlord's acceptance of the foregoing fee shall be construed to impose any duty whatsoever upon Landlord to consent to Tenant's request.

9.13.3 If Landlord consents to a Subletting, Tenant shall deliver to Landlord true copies of all documents establishing the Subletting, and if the Subletting requires the Subtenant to pay to, or on behalf of, Tenant payments (regardless of how characterized, excluding however, payments from or on behalf of the transferee for Tenant's assets, fixtures, inventory, accounts, goodwill, equipment, furniture, leasehold improvements (except with respect to the those tenant improvements, the cost of which has been paid by Landlord through the Tenant Improvement Allowance), and general intangibles) greater (calculated on a per square foot basis) than the payments to be paid by Tenant to Landlord under this Lease (regardless of how such payments are

characterized), Landlord will be entitled to receive from Tenant each month as additional rent an amount equal to half of such excess (the "Excess Sublease Payment"), determined after first deducting therefrom Tenant's transaction costs (e.g., broker fees, legal fees and costs, demising costs, advertising, vacancy costs while marketing space, and inducements and indemnity paid or promised to transferee). The Subletting and the Subtenant shall be subject to all of the provisions of this Lease (including the Rules and Regulations), and a Breach by the Subtenant shall be deemed a Breach by Tenant.

Section 9.14 Amendment; No Oral Agreements.

9.14.1 Neither this Lease nor any provision thereof may be changed, waived, discharged, or terminated orally, but only by an instrument clearly designated an amendment (or termination, as the case may be), duly executed by the party against which the enforcement of the change, waiver, discharge, or termination is sought.

9.14.2 This Lease merges and supersedes all prior agreements and understandings between the parties concerning the subject matter hereof, and constitutes the final and complete agreement and understanding between the parties. There are no oral statements or oral agreements modifying or otherwise affecting the subject matter of this Lease.

Section 9.15 No Waiver, No Exhaustion of Landlord's Rights. No consent or waiver, express or implied, by Landlord, to or of any Breach by Tenant, shall be construed as a consent to or waiver of any other Breach by Tenant of the same or any other duty. No consent or waiver by Landlord to any Breach by Tenant shall be effective unless it is in writing and signed by Landlord. Landlord's failure to enforce any of the Rules and Regulations against Tenant or any other tenant or occupant of the Building shall not be deemed a waiver of the Rules and Regulations or right to enforce same. Neither Landlord's acceptance of Tenant's keys to the Premises nor any other act by Landlord or any agent or employee of Landlord shall be deemed an acceptance or a surrender of the Premises, except for a written agreement that is clearly designated an acceptance of surrender of the Premises, duly executed by an authorized representative of Landlord.

Section 9.16 Estoppel Certificates. Tenant shall without charge, from time to time, within fifteen days after a request by Landlord, execute and deliver to Landlord a so-called "estoppel certificate," in form reasonably satisfactory to Landlord, as to the status of (i) this Lease, (ii) Rent and other payments due hereunder, (iii) Landlord Failures known by Tenant, (iv) any claims or counterclaims, defenses, or offsets that Tenant may have, and (v) all other matters required by any mortgagee or prospective mortgagee or prospective purchaser, and such matters as Landlord may reasonably request; and any such certificate may be relied upon by any mortgagee, assignee of any mortgagee, any prospective purchaser or mortgagee of the Building, any party proposing to acquire any other interest in or with respect to the Land and the Building, and any person or entity to whom the certificate is exhibited or delivered.

Section 9.17 Subordination. At the request of Landlord from time to time, Tenant shall subordinate this Lease, and Tenant's rights hereunder, to any mortgage or ground lease (or other

underlying lease), but only on condition that the holder of such mortgage or lease enters into a so-called "subordination, non-disturbance, and attornment agreement" ("**SNDA**") with Tenant on the mortgagee's (or lessor's) customary form, in form and substance reasonably satisfactory to Tenant, binding upon the successors and assigns of the parties thereto. The SNDA shall provide, *inter alia*, that the holder agrees that, in the event of a foreclosure of the mortgage, by entry or by sale, or termination of the lease, Tenant, if Tenant is not then in Breach with respect to any of the covenants or conditions of this Lease to be performed or observed by Tenant, shall peaceably hold and enjoy the Premises for the remainder of the Lease Term upon the same terms, covenants, and conditions as in this Lease contained and without hindrance or interruption from such holder or lessor, and Tenant shall, among other things, in the event of such entry or foreclosure (or lease termination), recognize such holder or any other person acquiring title to the Premises (or the lessor) as Landlord hereunder for the balance of the Lease Term; and such agreement shall also provide that no said holder (or lessor) shall be deemed to be the owner of the Premises until said holder shall have acquired title to the Premises or shall have entered the Premises as mortgagee in possession or for the purposes of foreclosure or as lessor who has terminated the lease, as the case may be.

Section 9.18 Joint and Several Liability. If Tenant consists of more than one person, the duties of all such persons are joint and several.

Section 9.19 Severability. If any term of this Lease, or the application thereof to any persons or circumstances, shall to any extent be illegal, invalid, or unenforceable, the remainder of this Lease or the application of such term to persons or circumstances other than those as to which it is illegal, invalid, or unenforceable, shall not be affected thereby, and each term of this Lease shall be legal, valid, and enforceable to the fullest extent permitted by law. Tenant has had an opportunity to consult with legal counsel of its choice, and Tenant shall not assert that any claimed ambiguity herein should be construed against the drafter thereof.

Section 9.20 Limitation of Liability. No agents, managers, partners, trustees, stockholders, officers, members of a governing board, directors, employees, or beneficiaries of Landlord shall be personally liable under this Lease nor shall any of their general assets be subject to levy, execution, or other enforcement procedure for the satisfaction of Tenant's remedies arising under this Lease or in connection with Tenant's use or occupancy of the Premises, the Land, or the Building. Tenant shall look solely to Landlord's then equity interest in the Premises and the rentals from the Building or the Land, for the collection of any judgment (or other judicial process) requiring the payment of money by Landlord in the event of any Landlord's default, subject, however to the prior rights of any ground or underlying lessor or the holder of any mortgage covering the Land or Building; and no other assets of Landlord shall be subject to levy, execution, or other judicial process for the satisfaction of Tenant's claims.

Section 9.21 Cumulative Effect. Any and all rights, powers, and remedies that either Landlord or Tenant may have under this Lease, at law, in equity and by statute or otherwise shall be cumulative and shall not be deemed inconsistent with each other, and any two or more of the same may be exercised at the same time. Landlord (or Tenant) may exercise a right or remedy without waiving,

limiting, or jeopardizing its right to exercise its other rights. Landlord has no duty under this Lease to enforce the Rules and Regulations, or the terms, conditions, or covenants of any lease, as against any other tenant or occupant of the Building, and Landlord shall not be liable to Tenant for violations of same by any other tenant, employee, invitee, licensee, agent, or visitor, provided, however, that Landlord shall not discriminate against Tenant in the enforcement of such Rules and Regulations.

Section 9.22 Notice of Lease. Tenant shall not record this Lease; however, upon request by Tenant, Landlord will execute and deliver to Tenant a recordable notice of this Lease in the statutory form, but only if the Lease Term is seven years or more.

Section 9.23 Access to Premises; Landlord's Right to Repair and Alter.

9.23.1 Viewing, Inspecting, Repairing. Landlord and Landlord's agents (and other tenants and such tenant's agents to the extent that there are pipes, flues, ducts, wires, conduits, electrical closets, and the like, in the Premises serving such other tenants or their premises) shall have the right, without charge to Landlord (or such other tenants) and without reduction in Rent, from time to time, at reasonable times and upon prior 24-hour notice (and in an emergency, at any time without any such notice requirement), to enter to view the Premises, to inspect the Premises, to make such repairs to the Premises or the Building or Building mechanical systems as Landlord (or such other tenants) elects, and to perform environmental site inspections or soil investigations, or to inspect or repair Landlord's utilities, if any, located in, beneath, above, or adjacent to the Premises, or to exterminate pests from the Premises.

9.23.2 Landlord Alterations. Landlord reserves the right, exercisable by Landlord or its agents or designees, at any time and from time to time, to make such changes, alterations, additions, improvements, repairs, renovations, or replacements in or to the Building and the Premises and the fixtures and equipment thereof, as Landlord may reasonably deem necessary or desirable, and to install in the Premises, pipes, ducts, wires, conduits, meters, fixtures, supporting columns, and other installations generally, and to change the arrangement or location of entrances, passageways, doors, doorways, corridors, elevators, stairs, toilets, or other public parts of the Building, or any of the Common Facilities, provided that to the extent reasonably practicable, such pipes, conduits, wires and ducts shall be located behind walls or above the finished ceilings or below floors of the Premises. The foregoing notwithstanding, unless Tenant otherwise consents or Landlord is required to do so by any Legal Requirement, Landlord shall not have the right to make changes which increase costs of operation of the Premises, or materially reduce the size of the Premises, or materially and adversely affect Tenant's use of the Premises. Except in case of an emergency, Landlord agrees to exercise its rights under this Section 9.23.2 at such times and in such a manner so as not to materially interfere with Tenant's business operations in the Premises. If the size of the Premises is reduced as set forth above, the Base Rent and Tenant's Proportionate Share shall be reduced proportionately. Landlord shall provide reasonable written notice to Tenant prior to any entry into the Premises hereunder, except, however, in the event of emergency, in which case no notice shall be required.

9.23.3 Right to Affix "For Rent" Sign. Landlord reserves the right to show the Premises to prospective purchasers, tenants, and mortgagees and to keep affixed to any suitable part of the Premises a notice for letting or selling during the six months preceding the expiration of the Lease Term or at any time after the termination of the Lease.

Section 9.24 Yielding Up; Holding Over.

9.24.1 Yielding Up of Premises on Termination or Expiration. Tenant shall, at the expiration or earlier termination of this Lease, promptly remove Tenant's goods and effects and peaceably yield up the Premises (together with any additions and improvements made thereto), clean and in good order, repair, and condition (damage by fire, other casualty, eminent domain and reasonable wear and use excepted). Unless Landlord requests Tenant to remove from the Premises the Tenant FETI Tenant shall have no right to remove such Tenant FETI other than Removable FETI without Landlord's prior written consent, and if any such removal causes any damage or alteration to the Premises, then Tenant shall promptly repair same, or, at Landlord's election, pay to Landlord money sufficient to cover the cost (as reasonably estimated by Landlord) for restoring the Premises. Any Tenant FETI, goods, effects, or personal property remaining in or on the Premises after Tenant vacates the Premises or after the termination or expiration of this Lease (whichever first occurs) shall be deemed abandoned, and Landlord shall have the right to remove same at Tenant's expense and use, sell, or destroy same as Landlord may elect.

9.24.2 Holding Over. If Tenant occupies the Premises after the Lease Expiration Date (or earlier termination of this Lease) without having entered into a new lease of the Premises with Landlord, Tenant shall be a tenant-at-sufferance only, shall be subject to all of the terms and provisions of this Lease, and shall pay as use and occupation each month an amount equal to 150% of the monthly Basic Rent payments in effect for the last full calendar month preceding the Lease Expiration Date (or the date of earlier termination). Such a holding over, even if with the consent of Landlord, and regardless of any conditions or restrictions set forth on checks or payments made to Landlord (whether or not Landlord places restrictive endorsements on such checks or payments), shall not constitute a tenancy at will or an extension or renewal of this Lease, and shall not diminish or affect Landlord's right to recover possession of the Premises by self help, re-entry by summary proceedings, the provisions of this Lease, judicial process, or otherwise. Tenant shall save Landlord harmless and will exonerate, defend, and indemnify Landlord from and against any and all damages that Landlord suffers on account of Tenant's holding over in the Premises after the expiration or sooner termination of this Lease, except that Tenant shall not be liable for any consequential damages during the first 60 days of such holdover. Tenant will be obligated to comply with Section 9.24.1 even if Tenant holds over after expiration or termination of this Lease. Tenant hereby indemnifies Landlord against any liability resulting from delay by Tenant in surrendering and yielding up the Premises upon the termination or expiration of this Lease as provided herein, including any claims made by any succeeding tenant or prospective tenant founded upon such delay or failure to yield up the Premises in the condition specified in Section 9.24.1, except that Tenant shall not incur such liability during the first 60 days of such holdover.

Section 9.25 PATRIOT ACT; Choice of Law.

9.25.1 Executive Order No. 13224 on Terrorist Financing, effective September 24, 2001 (the "Executive Order"), and the U.S. Bank Secrecy Act of 1970 as amended by the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001 (Public Law 10756, the "Patriot Act") prohibit certain property transfers. Tenant hereby represents and warrants to Landlord (which representations and warranties shall be deemed to be continuing and re-made at all times during the Lease Term) that neither Tenant nor any stockholder (except with respect to stockholders purchasing shares in a publicly traded company over a recognized stock exchange, the identity of which Tenant is not required by applicable law to ascertain), manager, beneficiary, partner, or principal of Tenant nor any of their respective agents is subject to or in violation of the Executive Order, that none of them is listed on or is owned or controlled by, or acting on behalf of any person listed on the United States Department of the Treasury Office of Foreign Assets Control list of "Specially Designated Nationals and Blocked Persons" as modified from time to time, and that none of them is otherwise subject to or in violation of the provisions of the Executive Order or the Patriot Act or is a person with whom Landlord is prohibited from dealing with or otherwise engaging with in accordance with the Executive Order or the Patriot Act. The most current list of "Specially Designated Nationals and Blocked Persons" can be found at the following web site:

http://www.treas.gov/offices/eotffc/ofac/sdn/index.html

Tenant shall from time to time, within ten days after request by Landlord, deliver to Landlord any certification or other evidence requested from time to time by Landlord in its reasonable discretion, confirming Tenant's compliance with these provisions. No Assignment or Subletting shall be effective unless and until the assignee or subtenant thereunder delivers to Landlord written confirmation of such person's compliance with the provisions of this subsection, in form and content satisfactory to Landlord. If for any reason the representations and warranties set forth in this subsection, or any certificate or other evidence of compliance delivered to Landlord hereunder, is untrue in any respect when made or delivered, or thereafter becomes untrue in any respect, then an Event of Default shall be deemed to occur immediately, and there shall be no opportunity to cure. Tenant shall indemnify, defend with counsel reasonably acceptable to Landlord, and hold Landlord harmless from and against, any and all liabilities, losses claims, damages, penalties, fines, and costs (including reasonable attorney's fees) arising from or related to the Breach of any of the foregoing representations, warranties, and duties of Tenant. The provisions of this subsection shall survive the expiration or earlier termination of this Lease for the longest period permitted by law.

9.25.2 This Lease may be executed in multiple counterpart copies, each being deemed an original and all of which shall be deemed to constitute one agreement, and the signatures of all of the parties need not appear on the same counterpart.

9.25.3 The laws of The Commonwealth of Massachusetts (without giving effect to its conflicts of law principles) govern this Lease. Legal actions involving this Lease shall be brought in the state courts of The Commonwealth of Massachusetts.

Section 9.26 Application of Payments; Check Endorsements. Regardless of how the payment is characterized by Tenant (or the person making payment on behalf of Tenant) at the time of payment

or otherwise, any payment made by or on behalf of Tenant to Landlord may be applied by Landlord, in Landlord's sole election, to Rent or any other amount due from Tenant to Landlord. No acceptance by Landlord of a sum less than the Rent or any other amount then due shall be deemed to be other than on account of the next due installment of such Rent or other amount, and Landlord shall be permitted to apply such lesser amount to Rent or any other amount then due, regardless of how Tenant characterizes the payment.

Section 9.27 Roof Rights Subject to Landlord's prior written approval with respect to design, location, and manner of installation, such approval not to be unreasonably withheld, Tenant shall have the right at its sole cost and expense, to install, operate, maintain, repair, replace, upgrade and remove, at no additional rental charge, one or more antennae, satellite dish, other transmission facilities, HVAC, and/or venting equipment, including all related cabling and wiring (collectively, the "**Rooftop Equipment**") on the Building roof. All Rooftop Equipment shall be deemed Tenant FETI for purposes of Section 9.24.1 hereof and in no event shall any Rooftop Equipment consisting of HVAC and/or venting equipment be deemed Removable FETI without Landlord's prior written consent. Without limiting the generality of the foregoing, Landlord acknowledges that the HVAC to be installed by Tenant, which will serve the Premises exclusively, shall not be removed by Tenant at the expiration or earlier termination of the Lease and shall be surrendered to Landlord "as is" subject to Tenant's maintenance obligations set forth in Section 5.1.2 hereof. Landlord reserves the right, in connection with approving the installation of any Rooftop Equipment, to require Tenant to use Landlord's roofing contractor in connection with any roof penetrations. Any removal of Rooftop Equipment by Tenant as may be permitted under Section 9.24.1 shall be done, at Tenant's sole cost and expense, under the supervision of Landlord's roofing contractor. Tenant shall be responsible for properly sealing any penetrations. Landlord, its employee, contractor or agent shall not install any equipment on the roof of the Building, nor shall Landlord permit any other tenant in the Building to install any equipment on the roof of the Building, after the installation of the Rooftop Equipment, which shall have an adverse material affect on, impede, disrupt or interrupt the operation of any of the Rooftop Equipment. The provisions of this Section 9.27 shall survive the expiration or earlier termination of this Lease.

Section 9.28 Signage Tenant shall have the right, at Tenant's sole cost and expense, to install a building façade sign on the Western Avenue side of the Building (if desired) with specifications and appearance subject to Landlord's reasonable approval and otherwise in accordance with the Legal Requirements and after receipt of the necessary approvals from the Governmental Authority, which shall be the sole responsibility of Tenant, at Tenant's sole cost and expense.

ARTICLE 10.0 ADDITIONAL PROVISIONS.

The provisions in this Article 10.0 set forth specific arrangements between Landlord and Tenant and supersede inconsistent provisions of this Lease.

Section 10.1 Landlord's Work Letter. Landlord shall perform the work, if any, described in **Exhibit C** hereto.

Section 10.2 Tenant Improvement Allowance. As an inducement for Tenant to enter into and faithfully perform under this Lease, Landlord shall pay an allowance (the "**Tenant Improvement Allowance**") equal to $130,440.00. The Tenant Improvement Allowance shall be used by Tenant as set forth in Section 12.2.17 of Exhibit C attached here and made a part hereof. The Tenant Improvement Allowance shall be payable directly to Tenant within thirty (30) days of submission to Landlord of **(i)** invoices from Tenant's contractor(s) performing such work; **(ii)** lien waivers from Tenant's contractors indicating payment for all services and materials relating to such improvements and to the Premises; and **(iii)** such other documents as Landlord may reasonably request. Tenant shall not be permitted to submit more than one (1) such request per calendar month for reimbursement from the Tenant Improvement Allowance. Any portion of the Tenant Improvement Allowance which remains unused by Tenant as of the date that is one hundred and twenty (120) days after the issuance of a Certificate of Occupancy for the Premises, shall be deemed waived by Tenant and Landlord shall have no further obligation with respect thereto. In the event Landlord fails or is unable to pay the Tenant Improvement Allowance, or any portion thereof, to Tenant as set forth in Exhibit C, Tenant shall have the right to apply the amount of such portion of the Tenant Improvement Allowance against the next installment of Basic Rent due under the Lease; provided, however, in the event there exists a dispute between Landlord and Tenant with respect to any request for reimbursement as described herein, Tenant shall not be permitted to apply any such amounts against any Rent or other charges due under this Lease until the dispute is resolved.

ARTICLE 11.0 OPTION TO EXTEND LEASE TERM.

Section 11.1 Tenant's Option to Extend. On the conditions (which conditions Landlord may in its sole discretion waive by notice to Tenant at any time) that (a) both as of the time of the exercise of Tenant's rights in this Article 11.0 and as of the commencement of the Extension Term there is no Event of Default; (b) that the person originally named as Tenant in Section 1.1 is occupying the entirety of the Premises then demised by this Lease, Permitted Transfers excepted; and (c) Landlord does not elect to use the Premises for occupancy by Harvard Real Estate – Allston, Inc. or for occupancy or use by an affiliate of Harvard University (collectively, the "**Harvard Use**"); then Tenant shall have the option to extend this Lease for the Extension Term. Tenant may exercise this option by giving notice ("**Extension Notice**") to Landlord not more than eighteen months and not less than one year before the Lease Expiration Date. The termination, expiration, cancellation, assignment (except with respect to a Permitted Transfer), or surrender of this Lease as to the entire Premises shall terminate any rights of Tenant pursuant to this Section. If Landlord elects to use the Premises for the Harvard Use, then Landlord shall so notify Tenant by written notice ("**Landlord's Use Notice**") and Tenant's option shall be deemed void. If Landlord does not deliver Landlord's Use Notice on or before the date eleven months before the Lease Expiration Date, Tenant shall by written request require that Landlord confirm its intention to use the Premises (or not to use the Premises) and Landlord shall, within 30 days thereafter, deliver written confirmation of its intention to use (or not use) the Premises for its own use. Such right to reserve the Premises for Harvard Use upon expiration of the Lease shall be personal to Harvard Real Estate – Allston, Inc. and any affiliate and shall not be assignable to any other unaffiliated owner of the Building or the Land.

Section 11.2 Determination of Rent for the Extension Term. The Basic Rent for the first Lease Year of the Extension Term shall be equal to the greater of the following:

(i) the annual Basic Rent for final Lease Year of this Lease, or

(ii) the Market Rent.

The term "**Market Rent**" shall mean the fair market rental value of the Premises for the first Lease Year of the Extension Term calculated as of the commencement of the Extension Term, based on the length of such Extension Term, and the value of similar space in the greater Allston/Brighton real estate market, after adjustment for the then current operating expenses, Additional Rent, real estate taxes, and other amounts payable by Tenant, taking into account the governing provisions of this Lease. Market Rent shall be calculated on the then "as is" condition of the Premises. The Market Rent shall be determined as follows:

(a) Landlord shall reasonably determine Market Rent and shall set forth its determination in a notice given to Tenant within sixty days after Tenant gives the Extension Notice.

(b) If Tenant accepts Landlord's determination, Tenant shall give Landlord an acceptance notice within fifteen Business Days. If Tenant in good faith disagrees with Landlord's determination, Tenant shall within fifteen Business Days after the receipt of Landlord's notice give Landlord notice of disagreement detailing Tenant's basis for disagreement. If Tenant fails to give Landlord any such notice during said fifteen Business Day period, Tenant shall be deemed to have irrevocably rejected Landlord's determination and rescinded Tenant's Extension Notice and Tenant's rights to extend this Lease shall be null and void.

(c) If Tenant gives such notice of disagreement, and Landlord and Tenant do not resolve by negotiation the Market Rent within thirty days after Tenant gives said notice of disagreement, the Market Rent shall be determined by appraisal as provided below.

(d) If Market Rent is to be determined by appraisal, then within ten days after the expiration of the thirty-day negotiation period referred to in Section 11.2(c), Landlord and Tenant shall each appoint as an appraiser a real estate broker experienced in leasing space similar to the Premises in the market or neighborhood area of the Premises or a similarly qualified real estate appraiser, and give notice of such appointment to the other party. If either Landlord or Tenant shall not so appoint such an appraiser, then the appointed appraiser shall select the second appraiser within ten days after the failure of Landlord or Tenant, as the case may be, to appoint. Such two appraisers shall, within thirty days after the appointment of the latter of them to be appointed complete their determination of the Market Rent based on the standards set forth in this Section 11.2, and submit their appraisal reports separately in writing to each of Landlord and Tenant. If the two valuations vary by less than five percent or less from their arithmetic average, the Market Rent shall be deemed to be the arithmetic average of the two valuations. If the valuations vary by more than five

percent from their arithmetic average, the two appraisers shall, within ten days after submission of the last submitted appraisal report, appoint a third appraiser who shall be similarly qualified, and, in addition, shall not have performed appraisal services for Landlord or Tenant in the previous five years. If the two appraisers are unable to agree timely on the selection of the third appraiser, then either appraiser, on behalf of both, may request such appointment by the President of the Boston Bar Association. Within thirty days after the appointment of the third appraiser, the third appraiser shall determine Market Rent and give notice to Landlord and Tenant of such determination together with a copy of the appraisal report. If the third appraiser's valuation is between the two valuations first obtained, then the Market Rent shall be deemed to be the valuation ("Third Valuation") as determined by the third appraiser, otherwise (y) if the Third Valuation is less than the valuation set forth in the lower of the first two appraisals previously obtained ("Lower Valuation"), then the Lower Valuation shall be deemed to be the Market Rent, or (z) if the Third Valuation is greater than the valuation set forth in the higher of the first two appraisals previously obtained ("Higher Valuation"), then the Higher Valuation shall be deemed to be the Market Rent.

(e) If the three appraisers have not established the Market Rent before the Lease Expiration Date, then the Basic Rent for the First Lease Year of the Extension Term shall be calculated under clause (i) of the first sentence of this Section 11.2, until the Market Rate is determined by the appraisers, and then the parties shall adjust for over or under-payments within ten days after notice of the decision of the appraisers finally establishing the Market Rent is given to Tenant and Landlord.

Section 11.3 Costs and Expenses. Landlord and Tenant shall each pay the fees of their respective appraisers and the fees of the third appraiser shall be paid one-half by Landlord and one-half by Tenant; provided, however, that if the Higher Valuation is more than 110% of the Lower Valuation, then if the Market Rent as finally determined is more than ten percent above the Lower Valuation, the fees of all appraisers shall be borne by the party appointing the appraiser responsible for the Lower Valuation, and if the Market Rent as finally determined is more than ten percent below the Higher Valuation, the fees of all appraisers shall be borne by the party appointing the appraiser responsible for the Higher Valuation.

Section 11.4 Continuation of Terms and Conditions. All of the terms, duties, covenants, and agreements contained in this Lease shall continue during the Extension Term.

Section 11.5 Intentionally Omitted.

Section 11.6 Definition. If this Lease is extended as provided herein, the phrase "**Lease Expiration Date**" shall mean the last day of the Extension Term, and the phrase "**Extension Term**" shall mean the applicable Extension Term if there is more than one Extension Term expressly provided for in this Lease. If this Lease grants Tenant the right to extend the Term of this Lease more than once, then the definitions and procedures of this Article 11.0 shall be deemed appropriately modified, mutatis mutandis, with respect to Tenant's second (and successive) exercise of the right to extend.

Lower Valuation, and if the Market Rent as finally determined is more than ten percent below the Higher Valuation, the fees of all appraisers shall be borne by the party appointing the appraiser responsible for the Higher Valuation.

Section 11.4 Continuation of Terms and Conditions. All of the terms, duties, covenants, and agreements contained in this Lease shall continue during the Extension Term.

Section 11.5 Intentionally Omitted.

Section 11.6 Definition. If this Lease is extended as provided herein, the phrase "**Lease Expiration Date**" shall mean the last day of the Extension Term, and the phrase "**Extension Term**" shall mean the applicable Extension Term if there is more than one Extension Term expressly provided for in this Lease. If this Lease grants Tenant the right to extend the Term of this Lease more than once, then the definitions and procedures of this Article 11.0 shall be deemed appropriately modified, mutatis mutandis, with respect to Tenant's second (and successive) exercise of the right to extend.

IN WITNESS WHEREOF, the parties have executed this Lease as of the date first above written, and this Lease shall take effect as an instrument under seal.

HARVARD REAL ESTATE-ALLSTON, INC.

By: /s/ James W. Gray
Name: James W. Gray
Title: Vice President

SNBL USA, Ltd.

By: /s/ Steven Meyer
Name: Steven Meyer
Title: President

EXHIBIT A: RULES AND REGULATIONS

RULES AND REGULATIONS FOR NON-RESIDENTIAL TENANTS

[Capitalized terms herein have the meanings set forth in Tenant's Lease].

Landlord reserves the right to amend or rescind, from time to time, any of these Rules and Regulations and to make such other and further Rules and Regulations as in its judgment shall, from time to time, be required. Such Rules and Regulations, when made, amended, or rescinded and notice thereof is given to a tenant, shall be binding upon the tenant. In the event of any conflict between these Rules and Regulations and the Lease, provisions of the Lease shall control.

1. The sidewalks, driveways, entrances, passages, courts, elevators, vestibules, stairways, corridors, halls, fire escapes, or other parts of the Building not occupied by any tenant shall not be obstructed by any tenant or used for any purpose other than ingress and egress to and from the tenant's premises. Landlord shall have the right to control and operate the public portions of the Building and the facilities furnished for common use of the tenants in such manner as Landlord deems best for the benefit of the tenants generally.

2. No awnings, signs, or other projections shall be attached to the outside walls of the Building without the prior written consent of Landlord. No drapes, blinds, shades, or screens shall be attached to or hung in, or used in connection with, any window or door of a tenant's premises, without the prior written consent of Landlord. Such awnings, projections, curtains, blinds, shades, screens or other fixtures must be of a quality, type, design, and color, and attached in the manner, approved by Landlord. No tenant shall throw anything out of the doors or windows or down the corridors, stairs, or air shafts.

3. The water, toilets, wash closets, and other plumbing fixtures shall not be used for any purposes other than those for which they were constructed, and no sweepings, rubbish, cooking oils, grease, cleaning solvents, rags, chemicals, paints, cleaning fluids, or other substances shall be put therein.

4. There shall be no marking, painting, drilling into, or in any way defacing the Building or any part of tenant's premises visible from public areas of the Building. Tenants shall not construct, maintain, use, or operate within the tenant's premises any electrical device, wiring, or apparatus in connection with a loud speaker system or other sound or alarm system except as reasonably required for its communication system and approved by Landlord before the installation thereof. The tenant shall bear all costs and pay all fines in connection with any malfunctioning system. If in the sole opinion of Landlord, the system becomes a nuisance or creates an unreasonable disturbance, the tenant shall promptly remedy or remove same as Landlord may request. No such loud speaker or sound system shall be constructed, maintained, used, or operated outside of tenant's premises.

5. No bicycles, vehicles, or animals, birds, or pets of any kind shall be brought into or kept in or about public areas, Common Facilities, or a tenant's premises and no cooking shall be done or permitted by any tenant in the tenant's premises.

6. No space in the Building shall be used by a tenant for manufacturing of goods, for the storage in bulk of merchandise or for the sale at auction of merchandise, goods, or property of any kind.

7. No flammable, combustible, radioactive, infectious, or explosive fluid, chemical, or substance shall be brought or kept upon a tenant's premises.

8. Landlord reserves the right to inspect all freight to be brought into the Building and to exclude from the Building all freight that violates any of these Rules and Regulations.

9. Landlord reserves the right to exclude from the Building at all times any person who is not known or does not give proper and satisfactory identification to the Building management. Tenants will comply with any measures instituted for the security of the building that may include the signing in or out in a register in the Building lobby after hours and on weekends and holidays. Each tenant shall be responsible for all persons for whom it authorizes entry into or exit out of the Building, and shall be liable to Landlord for all acts or omissions of such persons.

10. A tenant's premises shall not, at any time, be used for lodging or sleeping or for any immoral or illegal purpose.

11. Each tenant, before closing and leaving its premises at any time, shall see that all windows are closed and all lights (except security lights approved or required by Landlord or required by Legal Requirements) turned off.

12. Canvassing, soliciting, and peddling in the Building is prohibited and each tenant shall cooperate to prevent the same.

13. There shall not be any hand trucks used in any tenant's premises, or in the public halls of the Building, either by any tenant or by jobbers or others, in the delivery or receipt of merchandise, except those equipped with rubber tires and side guards. Tenants shall be responsible to Landlord for any loss or damage resulting from any deliveries to tenants.

14. Mats, boxes, trash, or other objects shall not be placed in the public corridors. Trash shall be stored and disposed of only in accordance with Landlord's instructions.

15. No one except Landlord and its employees and agents shall be allowed on the roof of the Building, in utility or janitor's closets, or in any basement areas except those areas specifically leased to a tenant or otherwise expressly designated for the tenant's use.

16. No tenant shall place any sign or advertising notice in any part of the Building except as approved by Landlord, or use any advertising or take any other action that in Landlord's judgment might tend to affect adversely the reputation of the Building and its desirability as a building for retail stores and offices.

17. Movement of furniture or office equipment, or dispatch or receipt by tenants of any bulky material, merchandise, or materials that requires use of elevators or stairways, or movement through the Building entrances or lobby, shall be restricted to such hours as Landlord may designate, and such movement shall be subject to control of Landlord.

18. Landlord shall have the authority to limit the weight and size and prescribe the manner that safes, file cabinets, and other heavy equipment are positioned.

19. Any passenger elevators are to be used only for the movement of persons and routine deliveries to a tenant's premises, unless an exception is first approved by Landlord in writing.

20. Tenants shall not tamper with or attempt to adjust temperature control thermostats in their respective premises. Tenant shall request Landlord to adjust thermostats to maintain required temperatures for heating, ventilating, and air conditioning.

21. No vending or coin- or token-operated machines of any type shall be allowed in a tenant's premises (or any common area) without the prior written consent of Landlord. Pin-ball machines, video games, and similar automatic amusement devices shall not be permitted on the tenant's premises.

22. Landlord shall not be responsible for lost or stolen personal property, including money or jewelry from a tenant's premises, the Common Facilities, or any public areas regardless of whether such loss occurs when such area is locked against entry or not.

23. Tenant shall participate fully and shall ensure that Tenant's employees participate fully in all safety programs, practices, and drills, relating to emergency evacuation of the Building. Tenant shall ensure that Tenant's employees are appropriately instructed and informed. Tenant shall provide appropriate evacuation monitors, assistants, and wardens as necessary to assist in evacuations.

24. Tenant shall deliver to Landlord at Landlord's request, a list of managers and supervisors employed on the tenant's premises and their home telephone numbers (or telephone numbers where such persons can be reached in an emergency).

25. Tenant shall not park automobiles, motorcycles, other vehicles, or bicycles on their Premises, on the Land, in the Building, on other land of Landlord, or in Landlord's other buildings unless expressly permitted in writing or in the tenant's lease.

EXHIBIT B: INTENTIONALLY DELETED

Term defined in or by reference in the Lease shall have the same meaning in this Exhibit as in the Lease.

ARTICLE 12.0 CONSTRUCTION PROVISIONS

Procedures:

Section 12.1 Condition of the Premises; Landlord's Work. Tenant acknowledges and agrees that Tenant is accepting the Buildings and the Premises in their "as is" condition and it is specifically understood and agreed that except with respect to Landlord's Work (defined below), Landlord has no obligation and has made no promises to alter, remodel, improve, renovate, repair or decorate the Premises, the Building, or any part thereof, or to provide any allowance for such purposes (except as specifically set forth herein), and that no representations respecting the condition of the Premises or the Building have been made by Landlord to Tenant (except as otherwise specifically set forth herein). Landlord shall perform Landlord's Work (defined below) at Landlord's cost, except as otherwise stated in this Article 12.0. Landlord shall commence Landlord's Work, subject to delays beyond its control, within thirty (30) days after execution of this Lease by all parties and shall diligently pursue the same to completion on or before (i) the Lease Commencement Date (with respect to demising walls), and (ii) the date that is four (4) months after the Lease Commencement Date (with respect to common area bathrooms). The term "**Landlord's Work**" shall mean the construction of demising walls in accordance with the space plan attached to this Lease as Exhibit D and renovation and remodeling of the common area bathroom facilities.

Section 12.2 Tenant's Work. Tenant shall perform Tenant's Work as set forth in this Article 12.0. The term "**Tenant's Work**" shall mean all work, decorations, additions, and alterations, other than Landlord's Work, that may be undertaken by or for the account of Tenant, to prepare, equip, decorate, and furnish the Premises for Tenant's use and occupancy, all in conformity with this Article 12.0 and the standard of quality construction, as determined by Landlord in its reasonable discretion.

12.2.1 Tenant's Plans. Tenant, at its sole cost (subject to reimbursement of such costs from the Tenant Improvement Allowance) shall cause to be prepared and delivered to Landlord, within sixty (60) days of the Date of this Lease, three copies of complete, detailed architectural, mechanical, and electrical drawings and specifications for Tenant's Work (the "**Tenant's Plans**"). Tenant's Plans shall describe all work necessary to fit the Premises for use by Tenant in the conduct of its business in a first-class manner, in compliance with all Legal Requirements and the requirements of this Lease, including the use and operational requirements set forth in Article 2.0 hereof. Tenant's Plans shall be subject to Landlord's prior written approval (not to be unreasonably withheld, conditioned or delayed) and shall be prepared by licensed architects and engineers first approved by Landlord. Tenant's Plans shall comply with all applicable Legal Requirements and shall conform to Landlord's interpretation of the Landlord's standards for the Building. If, in connection with determining whether or not to approve Tenant's Plans or revisions thereto,

Landlord incurs architectural, engineering, or any other professional fees, Tenant shall pay such reasonable fees as Additional Rent. Tenant shall have ten (10) Business Days following notice by Landlord to respond to any comments or changes requested by Landlord and to resubmit three copies of the revised Tenant's Plans to Landlord. Notwithstanding anything herein to the contrary, Landlord's approval rights as to the Tenant's Plans shall be limited to a review of the Tenant's Plans to confirm that: (i) the improvements are reasonably compatible with (and not damaging to) the structural, mechanical, electrical, plumbing and other systems of the Building, (ii) the improvements do not materially adversely impact (in Landlord's reasonable judgment) either the exterior appearance or operations of the Building or the appearance or operations of the public areas of the Building and (iii) the improvements comply with Legal Requirements. Within ten (10) Business Days after delivery of a complete set of the Tenant's Plans to Landlord, Landlord shall either approve such Tenant's Plans or notify Tenant of the specific item(s) of such Tenant's Plans of which Landlord disapproves and a detailed description of the reason(s) for such disapproval. If Landlord disapproves any of the Tenant's Plans, within ten (10) Business Days after receipt of Landlord's disapproval notice, Tenant shall revise and resubmit same to Landlord for approval, which approval shall not be unreasonably withheld or conditioned. The above process shall be repeated until such time as Landlord has approved or is deemed to have approved the Tenant's Plans. If, as, and when Landlord shall approve (or deemed to have approved as set forth below) Tenant's Plans, the same shall become final and three copies thereof shall be signed by Landlord and Tenant, two sets to be retained by Landlord and one set to be retained by Tenant. Tenant's Plans shall not be changed without the prior written approval of Landlord in each instance, not to be unreasonably withheld, conditioned or delayed. In the event Landlord fails to either approve or disapprove in writing Tenant's Plans within said ten (10) Business Day review period, then Tenant may provide Landlord with a reminder notice, (which shall include a duplicate set of Tenant's Plans) which notice shall bear the following caption prominently in the subject line of such notice: **"THIS NOTICE SHALL CONSTITUTE THE FIVE (5) BUSINESS DAY REMINDER NOTICE AS SET FORTH IN SECTION 12.2.1 OF THE LEASE. LANDLORD'S FAILURE TO EITHER APPROVE OR DISAPPROVE THE ENCLOSED TENANT'S PLANS IN ACCORDANCE WITH THE PROVISIONS OF SECTION 12.2.1 OF THE LEASE WITHIN FIVE (5) BUSINESS DAYS OF LANDLORD'S RECEIPT HEREOF SHALL BE DEEMED TO BE LANDLORD'S WRITTEN APPROVAL OF THE ENCLOSED TENANT'S PLANS"** (the "**Reminder Notice**"). The Reminder Notice shall be delivered to Landlord's Property Manager, Joseph Jones, with a copy to Peter Sullivan, Assistant Director, University and Commercial Leasing, both at Landlord's address set forth in Section 9.2 and otherwise in accordance with the notice provisions in Section 9.2. In the event Landlord fails to either approve or disapprove in writing Tenant's Plans within five (5) Business Days of Landlord's receipt of said Reminder Notice, the version of Tenant's Plans which shall have been attached to both the original notice to Landlord and the Reminder Notice to Landlord shall be deemed approved. Landlord's approval of Tenant's Plans (regardless of whether such approval is actual or deemed as set forth above) shall not constitute an opinion or agreement by Landlord that the same are sufficient or that they are in compliance with Legal Requirements, nor shall such approval impose any present or future liability on Landlord or waive any of Landlord's rights hereunder. Tenant, at Tenant's sole cost (or at Landlord's election, Landlord, at Tenant's sole cost), shall perform all appropriate filings

with applicable Governmental Authorities and shall obtain all such approvals and permits as required for the construction of the work depicted on Tenant's Plans. If Tenant requests modifications of, or additions to, the approved Tenant's Plans and if Landlord gives its approval, Tenant shall, in each instance, pay the costs (including reasonable attorney's fees) relating to such modifications or additions, including any professional or other fees or cost incurred, or to be incurred by Landlord and Tenant in respect thereof (but nothing herein contained shall compel Landlord to approve such modifications of, or additions to, the approved Tenant's Plans). Landlord's approval of such modification to the Tenant's Plans shall be subject to the same time requirements as the review and approval of the original Tenant's Plans, including, without limitation, the deemed approval of such modification in the event Landlord fails to either approve or disapprove of such requested modification within five (5) Business Days of Landlord's receipt of a Reminder Notice in connection with Tenant's request for Landlord's review and approval of any such modification to Tenant's Plans.

12.2.2 Tenant's Work. Tenant's Work shall be performed by Tenant at Tenant's own cost, subject to reimbursement of such costs from Tenant Improvement Allowance. Landlord shall have no responsibility to Tenant or to any contractor, subcontractor, supplier, materialman, workman, or other person, firm, or corporation who engages or participates in any Tenant's Work or other matter on behalf of Tenant. The cost of any Tenant's Work performed by Landlord (although Landlord shall have no duty to do so) except for Landlord's Work, which shall be performed by Landlord at its sole cost, shall be paid by Tenant as Additional Rent.

12.2.3 No Entry. Unless Landlord has given Tenant prior written authorization to the contrary in each instance, neither Tenant nor Tenant's agents shall enter upon the Premises during the progress of Landlord's Work. If any such entry is permitted and so authorized by Landlord, such entry shall be deemed to be under all the terms, covenants, provisions, and conditions of this Lease. In any event, Landlord shall not be liable in any way for any injury, loss, or damage that occurs to Tenant or Tenant's agents, or to their property, except to the extent such injury, loss, or damage is due to the omission, fault, negligence, or other misconduct of Landlord or its agents, contractors or employees.

12.2.4 Licensed Architect. Tenant's Work shall be conducted under the supervision of a licensed architect or engineer selected by Tenant and approved by Landlord, such approval not to be unreasonably withheld, conditioned or delayed. Prior to commencing Tenant's Work, Tenant shall deliver to Landlord the name and address of Tenant's general contractor, subcontractors, material suppliers, and laborers, and a breakdown of the aggregate total cost of Tenant's Work. Tenant will perform all Tenant's Work in a good and workmanlike manner, with reasonable dispatch, using only new, first class materials and supplies, all in accordance with Tenant's Plans and all Legal Requirements, approvals, permits, licenses, or consents required by any Legal Requirements or Insurance Requirements or by any Governmental Authority at any time having jurisdiction. Tenant warrants that Tenant's Work, when completed, will comply with all Legal Requirements and Insurance Requirements and that the Building shall not violate any Legal Requirements or Insurance Requirements as a result of Tenant's Work. In the event Landlord has a construction superintendent or agent in, on, or about the Building, Tenant's contractors will be

subject to such construction superintendent's or agent's rules and regulations as promulgated by the superintendent, especially as to the orderly flow or work, utilization of on-site utilities, loading and unloading, and noninterference with other tenants, occupants, customers, agents, invitees, or any others in or upon the Land or the Building, so long as such rules and regulations are applied to other tenants in the Building consistently on a non-discriminatory basis.

12.2.5 Cost of Tenant's Work. The cost of Tenant's Work shall be paid by Tenant in cash or its equivalent, so that the Premises and Building shall at all times be free of liens in connection with Tenant's Work. If at any time the Premises or Building shall be encumbered by any mechanics' or other liens, charges, or claims for the payment of money or otherwise, or any violations or other encumbrances of any and all kinds, nature, and description, growing out of or connected with Tenant's Work or any other matter pertaining to Tenant, then Tenant shall address such matters in accordance with Section 5.1.8 of the Lease.

12.2.6 Insurance During Construction. During the course of Tenant's Work, Tenant (and all of its contractors and subcontractors) shall carry or cause to be carried adequate worker's compensation insurance, builder's risk and comprehensive general liability insurance in limits reasonably determined by Landlord, and such other insurance as may be required by law or as customarily carried for similar properties in the Boston metropolitan area, or required by this Lease. All such insurance (except the worker's compensation insurance) shall name Landlord, Landlord's managing agent, and all mortgagees and ground lessors and such other parties as Landlord shall designate, as additional insureds.

12.2.7 Inspection of Premises. Landlord, its architects, engineers, agents, and employees may enter upon and inspect the Premises for the purpose of ensuring that Tenant's Work conforms with the requirements herein contained and for any other purpose. Tenant shall keep all plans, shop drawings, and specifications relating to Tenant's Work in the Premises, and Landlord may examine same at all reasonable times. If during Tenant's Work, Landlord, its architects, or engineers determine that Tenant's Work is not proceeding in accordance with Tenant's Plans, Landlord shall give notice to Tenant specifying the particular deficiency or omission and Tenant shall thereupon promptly correct said deficiency or omission.

12.2.8 No Delay or Expense to Landlord. All of Tenant's Work shall be done in such a manner so as not to interfere with, delay, or impose any expense upon Landlord in the performance of Landlord's Work or in the maintenance of the Building, nor to physically affect any part of the Building outside the interior of the Premises, or (in Landlord's sole judgment) to impair the structural integrity of the Building, nor affect the proper functioning of any of the Building mechanical systems, nor violate any of Landlord's Rules and Regulations affecting the Building or the Premises. In addition, Tenant shall perform all of Tenant's Work in a manner that will not create any work stoppage, labor disruption, or dispute or violate Landlord's union contracts (if any) affecting the Building, nor unreasonably interfere with the business of Landlord or with any other tenant or occupant of the Building. Without limiting Landlord's remedies for Tenant's Breach or threatened Breach of any of the foregoing, Landlord shall have the right to stop any Tenant's Work that involves such a Breach or threatened Breach upon twenty four (24) hours prior notice to Tenant

(which notice may be verbal notice to Tenant's construction representative or project manager), except in the case of an emergency, in which case, Landlord shall have the right to immediately stop any Tenant's Work that involves such a Breach or threatened Breach.

12.2.9 Repair of Tenant's Work. Tenant shall, at its sole cost, make all repairs to the Premises necessitated by Tenant's Work, and shall keep and maintain in good order and condition all installations arising from, and all defects in, Tenant's Work, and shall make all necessary replacements thereto, and shall indemnify, defend, and hold Landlord harmless from and against all costs (including reasonable attorney's fees), loss, and liability arising in connection with same, except where caused by the omission, fault, negligence, or other misconduct of Landlord or its agents, contractors, invitees, licensees or employees.

12.2.10 Lien Releases. With respect to Tenant's Work, Tenant, at its sole cost, shall procure and deliver to Landlord, in form and substance satisfactory to Landlord (i) written partial releases of liens executed by contractors, subcontractors, material suppliers, and laborers simultaneous with and to the extent of payment for the labor performed or materials furnished by such contractor, subcontractor, material supplier, or laborer, and (ii) final releases of lien simultaneous with final payments to contractors, subcontractors, material suppliers and laborers. Tenant shall also obtain and furnish to Landlord (i) all appropriate certifications from all Governmental Authorities having jurisdiction (including a certificate of occupancy), and (ii) a certification from Tenant's architect to the effect that all of Tenant's Work has been performed and completed in accordance with Tenant's Plans and with all Legal Requirements, and (iii) a full set of true, complete, and correct as-built plans for the Premises.

12.2.11 Restrictions on Tenant's Work. No Tenant's Work of any kind (except as may be expressly approved by Landlord) shall be made that might (i) decrease the total cubical volume of the Premises, or (ii) give to any owner, lessee, or occupant of any other Building or to any other party, any easement, right-of-way, or any other right over the Premises, or (iii) decrease or modify the basic utility or function of the Premises.

12.2.12 Security and Fire Systems. Where applicable, Tenant, at its sole cost, shall have the duty to tie in and coordinate its security and/or fire alarm systems with the systems installed in the Building in which the Premises are located.

12.2.13 No Abatement or Allowance. Except with respect to the Tenant Improvement Allowance provided for hereunder, Tenant shall not be entitled to any abatement, allowance, reduction, or suspension of the Rent reserved hereunder by reason of any Tenant's Work or alterations made to the Premises subsequent to Tenant's Work, nor shall Tenant, by reason thereof, be released from any duties imposed upon Tenant under this Lease. No FETI or any other items supplied by Tenant to the Premises shall be subject to any conditional sales agreements, security agreements, or other encumbrances without Landlord's prior written consent, not to be unreasonably withheld, conditioned or delayed.

12.2.14 Landlord's Covenants. Tenant and Tenant's contractors, at the expense of Tenant or Tenant's contractors, subject to reimbursement of such costs from the Tenant Improvement Allowance, shall be allowed to utilize power, water and other existing utility facilities as necessary and required in connection with construction of the Tenant' Work in the Premises. In addition, Tenant and Tenant's contractors shall be allowed to utilize on a non-exclusive basis the Building's loading docks in connection with construction of the Tenant's Work in the Premises at no additional cost or expense to Tenant. Tenant agrees to coordinate use of the loading docks with Landlord.

12.2.14 Cooperation. During the entire course of the construction process, Tenant and Landlord each shall respond to requests for information or decisions with reasonable dispatch. Without limiting the foregoing, each party shall cooperate with the other to facilitate and expedite the efficient design and construction of the Tenant's Work.

12.2.15 Landlord Delays. If completion of the Tenant's Work is delayed by a Landlord Delay, the Rent Commencement Date shall be extended by each day of such Landlord Delay. A "**Landlord Delay**" means delay in Substantial Completion (as defined herein) of the Tenant's Work as a result of: (a) Landlord's failure to respond to submissions of drawings and specifications within the time periods required under Section 12.2.1 above, (b) Landlord's failure to provide Tenant and its contractors access to and use of utilities, and loading docks as provided under Section 12.2.14 above, and (c) any other delays caused by Landlord or its employees, contractors or agents, which has not been cured within ten days after receipt of written notice from Tenant. "**Substantial Completion**" means that construction has been sufficiently completed such that the Premises can be occupied and used to conduct Tenant's business without interference, as evidenced by either a certificate from Tenant's architect or a certificate of occupancy, if any. In the event Tenant commences business operations in the Premises, Substantial Completion of Tenant's Work shall be deemed to have been achieved.

12.2.16 Early Access. Tenant's access to the Premises for purposes of constructing the Tenant's Work shall be subject to all of the terms and conditions of this Lease, except that Tenant during that time shall have no obligation to make payment of Rent, provided however, Tenant shall pay all utility costs during any early access period.

12.2.17 Tenant Improvement Allowance. In connection with the construction of the Tenant's Work, Landlord shall provide Tenant with the Tenant Improvement Allowance to pay some or all Costs of Construction (as defined below) in the amount set forth in Section 10.2. Tenant shall bear all Costs of Construction in excess of the Tenant Improvement Allowance after said Tenant Improvement Allowance has been fully funded as set forth in Section 10.2 of the Lease (the "**Tenant's Excess Cost**"). As used in this Lease, the phrase "**Costs of Construction**" means all costs and expenses incurred in connection with design and construction of the Tenant's Work, including, without limitation, space planning, architectural and engineering fees and expenses for preparation of the Tenant's Plans and any approved changes thereto; permit and inspection fees; amounts paid to contractors, subcontractors and material suppliers; premiums for insurance and bonds, costs of utilities, equipment rental, labor, materials and supplies, and sales taxes thereon; and any third party construction management fees. Landlord shall make disbursements from the Tenant Improvement Allowance as set forth in Section 10.2 of the Lease.

EXHIBIT E

PROHIBITED USES

1. Any use or purpose involving the handling, storage, production or use of live virus stocks or other adventitious agents.

2. Any use or purposes involving the handling, storage, production or use of chemical or biological agents requiring Biosafety Level 3 or above, as set forth by the National Institute of Health, *Biosafety in Microbiological and Biomedical Laboratories*.

3. Any use or purpose involving the use of equipment that project or emit substantial magnetic or electromagnetic fields such as, but not limited to, MRI and Xray equipment.

Exhibit 10.3

CONSENT TO OFFICE SPACE SUBLEASE
1320 SOLDIERS FIELD ROAD, BOSTON, MASSACHUSETTS

THIS CONSENT TO SUBLEASE ("Consent Agreement") dated as of January 1, 2010, is made with reference to that certain sublease (the "Sublease") dated January 1, 2010, by and between SNBL USA, Ltd., with an address at 6605 Merrill Creek Parkway, Everett, WA 98203 ("Tenant") and Ontoril, Inc., with an address at 419 Western Ave., Boston, MA 02135 ("Subtenant"), and is entered into by and among Harvard Real Estate – Allston, Inc., with an address at c/o Harvard Real Estate Services, 1350 Massachusetts Avenue, Holyoke Center – Suite 800, Cambridge, Massachusetts 02138-3826 Massachusetts 02110 (together with its successors and assigns, "Landlord"), Tenant and Subtenant, with reference to the following facts:

(A) Landlord and Tenant are the parties to that certain lease dated as of June 25, 2009 ("Master Lease");

(B) Tenant and Subtenant wish to enter into the Sublease;

(C) The Master Lease provides, inter alia, that Tenant may not enter into the Sublease without Landlord's prior written approval;

(D) Tenant and Subtenant have presented the fully-executed Sublease (a true and complete copy of which is attached) to Landlord for Landlord's approval, upon all of the terms and conditions hereinafter appearing.

NOW, THEREFORE, for good and valuable consideration, the parties agree as follows:

1. Landlord hereby consents to the Sublease upon the terms and conditions set forth below.

2. This Consent shall not release Tenant from any existing or future duty, obligation or liability to Landlord pursuant to the Master Lease, nor shall this Consent change, modify or amend the Master Lease in any manner, except insofar as it constitutes Landlord's consent to the Sublease. Without limiting the generality of the foregoing, this Consent shall not relieve Tenant from any requirement set forth in the Master Lease that Tenant obtain Landlord's prior written approval of any additional subleases, assignments or other dispositions of its interest in the Master Lease or the Premises (as defined in the Master Lease).

3. (a) In the event of a Master Lease Termination (as hereinafter defined) prior to the termination of the Sublease, at the request of Landlord Subtenant agrees to attorn to Landlord and to recognize Landlord as Subtenant's landlord under the Sublease, upon the terms and conditions and at the rental rate specified in the Sublease, and for the then remaining term of the Sublease, except that Landlord shall not be bound by any provision of the Sublease which in any way increases Landlord's duties, obligations or liabilities to Subtenant beyond those owed to Tenant under the Master Lease or by any provision which grants or attempts to grant Subtenant

any rights, privileges or benefits greater than those possessed by Tenant under the Master Lease. Subtenant hereby waives any provisions of applicable law which may permit Subtenant (i) to terminate the Sublease other than pursuant to its terms or (ii) to surrender possession of the Premises in the event of a Master Lease Termination; and Subtenant hereby agrees that the Sublease shall not be affected in any way whatsoever by a Master Lease Termination in the event Landlord requests Subtenant's attornment to and recognition of Landlord except as set forth above.

In no event shall Landlord ever (i) be liable to Subtenant for any act, omission or breach of the Sublease by Tenant, (ii) be subject to any offsets of defenses which Subtenant might have against Tenant, (iii) be bound by any rent or additional rent which Subtenant might have paid in advance to Tenant, or (iv) be bound to honor any rights of Subtenant in any security deposit made with Tenant by Subtenant except to the extent Tenant has specifically assigned and actually turned over such security deposits to Landlord.

Tenant hereby agrees that in the event of a Master Lease Termination, Tenant shall immediately pay or transfer to Landlord any security deposits, rent or other sums then held by Tenant in connection with the subleasing of the Premises. Subtenant hereby agrees that under no circumstances whatsoever shall Landlord be held in any way responsible or accountable for any security deposit or any sums paid by Subtenant to Tenant except to the extent that Landlord has actually received such sums from Tenant and has acknowledged their source, and Subtenant shall have no claim to any security or other deposit made by Tenant under the Master Lease.

(b) "Master Lease Termination" means any event, which by voluntary or involuntary act or by operation of law, might cause or permit the Master Lease (or Tenant's right to possess the Premises under the Master Lease) to be terminated, expire, be canceled, be foreclosed against, or otherwise come to an end, including but not limited to (1) a default by Tenant under the Master Lease of any of the terms and provisions hereof; (2) foreclosure proceedings brought by the holder of any mortgage or trust deed to which the Master Lease is subject; (3) the termination of Tenant's leasehold estate by dispossession proceeding or otherwise; or (4) termination of the Master Lease in accordance with its terms.

4. Subtenant shall be liable to Landlord, jointly and severally with Tenant, to the extent of the obligations undertaken by or attributable to Subtenant, for the performance of Tenant's agreements under the Master Lease. Landlord may elect to receive directly from Subtenant all sums due or payable to Tenant by Subtenant pursuant to the Sublease, and upon receipt of Landlord's notice, Subtenant shall thereafter pay to Landlord any and all sums becoming due or payable under the Sublease and Tenant shall receive from Landlord a corresponding credit for such sums actually received by Landlord against any and all payments then owing from Tenant. Neither the service of such written notice nor the receipt of such direct payments shall cause Landlord to assume any of Tenant's duties, obligations and/or liabilities under the Sublease, nor shall such event impose upon Landlord the duty or obligation to honor the Sublease in the event of a Master Lease Termination, nor subsequently to accept any purported attormnent by Subtenant not elected by Landlord pursuant to Section 3(a) hereof.

5. Subtenant hereby acknowledges that it is familiar with all of the terms and provisions of the Master Lease and agrees not to do or omit to do anything which would cause Tenant to be in breach of the Master Lease. Any such act or omission shall also constitute a breach of the Master Lease and this Consent and shall entitle Landlord to recover any damage, loss, cost, or expense which it thereby suffers, from Tenant and Subtenant, jointly and severally.

6. Tenant and Subtenant, jointly and severally, shall be liable to reimburse Landlord for any expenses, including reasonable attorneys fees and costs, incurred in enforcing any of the terms or provisions of this Consent.

7. The parties acknowledge that the Sublease constitutes the entire agreement between Tenant and Subtenant with respect to the subject matter thereof insofar as Landlord may be concerned, and that no termination or modification of the Sublease will be binding upon Landlord unless Landlord shall have given its prior written consent thereto.

8. This Consent shall be binding upon and shall inure to the benefit of the parties' respective successors and permitted assigns. The agreements contained herein constitute the entire understanding between the parties with respect to the subject matter hereof, and shall supersede all prior agreements, written or oral. Tenant and Subtenant warrant and agree that neither Landlord nor any of its agents or other representatives have made any representations concerning the Premises, their condition, the Sublease or the Master Lease.

9. Notice required or desired to be given hereunder shall be effective either upon personal delivery or one business day after deposit with an overnight delivery service or three (3) business days after deposit in the United States mail, by registered or certified mail, return receipt requested, addressed to parties at the addresses set forth in the first paragraph of this Consent. Any party may change its address for notice by giving notice in the manner hereinabove provided.

10. Notwithstanding anything to the contrary set forth herein or elsewhere, if the Master Lease has been guaranteed, then Tenant shall deliver to Landlord a written approval of the Sublease and this Consent by each such guarantor.

11. Tenant and Subtenant agree to indemnify and hold Landlord harmless from and against any loss, cost, expense, damage or liability, including reasonable attorneys' fees and costs, incurred as a result of a claim by any person or entity (i) that it is entitled to a commission, finder's fee or like payment in connection with the Sublease or (ii) relating to or arising out of the Sublease or any related agreements or dealings.

12. Tenant shall pay Landlord herewith the sum of $1,000 as reimbursement for Landlord's administrative expenses in acting upon Tenant's request for this Consent.

13. Landlord shall not be considered to have consented to the Sublease until this Consent is executed and delivered by Landlord, Tenant and Subtenant and approved by the holder of any mortgage on the Building (as defined in the Master Lease) having the right to

approve the Sublease. Any liability of Landlord to Tenant under or in connection with this Consent, and any liability of Landlord to Subtenant, including without limitation liability under or in connection with the Sublease or arising in any way from Tenant's use or occupancy of the subleased Premises, shall be limited to the same extent as Landlord's liability to Tenant is limited under the Master Lease.

EXECUTED under seal.

LANDLORD:

HARVARD REAL ESTATE – ALLSTON, INC.

By: /s/ Authorized Signatory
Name:
Title:
Duly Authorized

TENANT:

SNBL USA, LTD.

By: /s/ Hideshi Tsusaki
Name: Hideshi Tsusaki, DVM, PhD
Title: President & COO
Duly Authorized

SUBTENANT:

ONTORIL, INC.

By: /s/ Gregory L. Verdine
Name: Dr. Gregory L. Verdine
Title: President
Duly Authorized

Exhibit 10.4

Commercial Lease Agreement

This Commercial Lease Agreement ("Lease") is made and effective January 1, 2010, by and between SNBL USA, Ltd. A Washington Corporation having a notice address of 6605 Merrill Creek Parkway, Everett, WA 98203 ("Landlord") and Ontorii, Inc. a Delaware corporation having a notice address of 419 Western Ave. Boston MA 02135 ("Tenant").

Landlord is the leaseholder of certain land and improvements (the "Master Lease Premises") located at the real property commonly known and numbered as 1320 Soldiers Field Road, Boston, MA. Landlord has entered into a leasehold agreement with Harvard Real Estate – Allston Inc. ("Harvard") on June 25th, 2009, such lease is attached hereto and incorporated by this reference (the "Master Lease".) The land and improvements possessed by Landlord are legally described therein (the "Building").

Landlord makes available for lease a portion of the Building designated as marked on the attached floor plan, comprising a total of approximately 3850 sf. Landlord also makes available, as shared space in common, to share and share alike, an additional 408 sf, designated as "Conference Room Small" (approx 90sf), "Conference Room Large (approx. 188 sf) and "Common Lobby Area" (approx. 130 sf) (together the "Leased Premises" of approximately 4258sf). "Ontorii's Proportionate Share" of the Premises is thus ninety seven and 93/100 percent, determined by the ratio of leased space to total space: 4258/4348.

Landlord desires to sublease the Leased Premises to Tenant subject to and under the terms and conditions of the Master Lease and the consent to Office Space Sublease of even date, executed by the parties hereto and Harvard, and Tenant desires to lease the Leased Premises from Landlord for the term, at the rental and upon the covenants, conditions and provisions herein set forth. Landlord and Tenant further agree and acknowledge, that notwithstanding and of the terms used in this Lease, the Lease is a sublease by SNBL USA Ltd. as "tenant" under the Master Lease to Ontorii Inc. as sub lessee.

THEREFORE, in consideration of the mutual promises herein, contained and other good and valuable consideration, it is agreed:

1. **Term**.

A. Landlord hereby leases the Leased Premises to Tenant, and Tenant hereby leases the same from Landlord, for the "Lease Term" as defined in the Master Lease. Landlord shall use its best efforts to give Tenant possession as nearly as possible at the beginning of the Lease term. If Landlord is unable to timely provide the Leased Premises, rent shall abate for the period of delay. Tenant shall make no other claim against Landlord for any such delay.

B. Tenant may renew this Lease subject to Landlord's availability under the Master Lease, and upon Tenant giving reasonable advance notice to Landlord of intent to so extend, such notice no later than Landlord's required notice under the Master Lease. The renewal term shall be at the rental set forth below and otherwise upon the same covenants, conditions and provisions as provided in this Lease.

2. **Rental and Other Payments**.

A. Tenant shall pay to Landlord during the Term rental of $68,128.00 per year, payable in installments of $5,677.33 per month commencing on the Rent Commencement Date as defined in the Master Lease. Such rent represents Landlord's Basic Rent of $69,568.00 per annum ($5,797.33/month) under the Master Lease times the percentage of Ontorii's Proportionate Share. Each installment payment shall be due in advance on the first day of each calendar month during the lease term to Landlord at 6605 Merrill Creek Parkway, Everett WA 98203. or at such other place designated by written notice from Landlord or Tenant. The rental payment amount for any partial calendar months included in the lease term shall be prorated on a daily basis.

B. Tenant shall also pay Landlord any and all Additional Rents (as defined and calculated in the Master Lease) times Ontorii's Proportional Share. Such payments shall be made as defined in section 2A above. Landlord shall notify Tenant of changes to such additional rents when received as described by the Master Lease.

C. Tenant shall also pay Landlord, on a monthly basis, the sum of $925,984.94 in 112 monthly installments in the manner described in section 2A of $8,267.72 representing Tenant's cost of premises improvements made by Landlord. This monthly obligation survives any termination of this Lease and/or abandonment of the leased premises by Tenant.

D. The rental for any renewal lease term, if created as permitted under this Lease, shall be as defined to the Extension Term in the Master Lease payable in 12 equal installments as described in section 2A.

3. **Use**

Notwithstanding the forgoing, Tenant shall use the Leased Premises only for the Permitted Uses under the Master Lease and for no other uses. Tenant shall undertake all duties of care with respect to the premises, as undertaken by Landlord under the Master Lease.

4. **Sublease and Assignment**.

Tenant shall not sublease all or any part of the Leased Premises, nor assign this Lease in whole or in part without Landlord's consent.

5. **Repairs**.

During the Lease term, Tenant shall make, at Tenant's sole expense, all necessary repairs to the Leased Premises. Repairs shall include such items as routine repairs of floors, walls, ceilings, and other parts of the Leased Premises damaged or worn through normal occupancy, except for major mechanical systems or the roof, subject to the obligations of the parties otherwise set forth in this Lease.

6. **Alterations and Improvements**.

Tenant, at Tenant's expense, shall have the right following Landlord's consent to remodel, redecorate, and make additions, improvements and replacements of and to all or any part of the Leased Premises from time to time as Tenant may deem desirable, provided the same are made with first-class workmanship and materials and in complicance with all applicable legal and insurance requirements as defined in the Master Lease. Tenant shall have the right to place and install personal property, trade fixtures, equipment and other temporary installations in and upon the Leased Premises, and fasten the same to the premises. All personal property, equipment, machinery, trade fixtures and temporary installations, whether acquired by Tenant at the commencement of the Lease term or placed or installed on the Leased Premises by Tenant thereafter, shall remain Tenant's property free and clear of any claim by Landlord. Tenant shall have the right to remove the same at any time during the term of this Lease provided that all damage to the Leased Premises caused by such removal shall be repaired by Tenant at Tenant's expense.

7. **Property Taxes**.

Landlord shall pay, prior to delinquency, all general real estate taxes and installments of special assessments coming due during the Lease term on the Leased Premises, and all personal property taxes with respect to Landlord's personal property, if any, on the Leased Premises. Tenant shall be responsible for paying all personal property taxes with respect to Tenant's personal property at the Leased Premises.

8. **Insurance**.

A. If the Leased Premises or any other part of the Building is damaged by fire or other casualty resulting from any act or negligence of Tenant or any of Tenant's agents, employees or invitees, rent shall not be diminished or abated while such damages are under repair, and Tenant shall be responsible for the costs of repair not covered by insurance.

B. Landlord shall maintain fire and extended coverage insurance on the Building and the Leased Premises in such amounts as Landlord shall deem appropriate. Tenant shall be responsible, at its expense, for fire and extended coverage insurance on all of its personal property, including removable trade fixtures, located in the Leased Premises.

C. Tenant and Landlord shall, each at its own expense, maintain a policy or policies of comprehensive general liability insurance with respect to the respective activities of each in the Building with the premiums thereon fully paid on or before due date, issued by and

binding upon some insurance company approved by Landlord, and, notwithstanding any provision of this Lease, such insurance shall satisfy the requirements set forth in Section 9.7 of the Master Lease, including without limitation the requirement that such policy shall carry all endorsements required for Tenant's insurance under the Master Lease. Landlord shall be listed as an additional insured on Tenant's policy or policies of comprehensive general liability insurance, and Tenant shall provide Landlord with current Certificates of Insurance evidencing Tenant's compliance with this Paragraph. Tenant shall obtain the agreement of Tenant's insurers to notify Landlord that a policy is due to expire at least (10) days prior to such expiration. Landlord shall not be required to maintain insurance against thefts within the Leased Premises or the Building.

9. **Utilities**.

Tenant shall pay all charges for water, sewer, gas, electricity, telephone and other services and utilities used by Tenant (As calculated using Ontorii's Proportional Share) on the Leased Premises during the term of this Lease unless otherwise expressly agreed in writing by Landlord. In the event that any utility or service provided to the Leased Premises is not separately metered, Landlord shall pay the amount due and separately invoice Tenant for Tenant's pro rata share of the charges. Tenant shall pay such amounts within fifteen (15) days of invoice. Tenant acknowledges that the Leased Premises are designed to provide standard office use electrical facilities and standard office lighting. Tenant shall not use any equipment or devices that utilizes excessive electrical energy or which may, in Landlord's reasonable opinion, overload the wiring or interfere with electrical services to other tenants.

10. **Signs**.

Subject to Section 9.28 of the Master Lease, following Landlord's consent, Tenant shall have the right to place on the Leased Premises, at locations indicated in Section 9.28 of the Master Lease, any signs which are permitted by applicable zoning ordinances and private restrictions. Landlord may refuse consent to any proposed signage that is in Landlord's opinion too large, deceptive, unattractive or otherwise inconsistent with or inappropriate to the Leased Premises or use of any other tenant. Tenant shall repair all damage to the Leased Premises resulting from the removal of signs installed by Tenant.

11. **Entry**.

Landlord shall have the right to enter upon the Leased Premises at reasonable hours to inspect the same, provided Landlord shall not thereby unreasonably interfere with Tenant's business on the Leased Premises.

12. **Parking**.

During the term of this Lease, Tenant shall have the non-exclusive use in common with Landlord, other tenants of the Building, their guests and invitees, four (4) unassigned parking spaces in the surface parking lot located at 1330 Soldiers Field Road as non-

reserved common automobile parking areas, such spaces to be on a first come-first served basis; driveways, and footways, subject to rules and regulations for the use thereof as prescribed from time to time by Landlord in conformance with the Master Lease. Landlord reserves the right to designate parking areas within the Building or in reasonable proximity thereto, for Tenant and Tenant's agents and employees. Tenant shall provide Landlord with a list of all license numbers for the cars owned by Tenant, its agents and employees. Tenant hereby leases from Landlord three (3) designated parking spaces in the surface parking lot located on the Land at 1320 Soldiers Field Road.

13. **Building Rules**.

Tenant will comply with the rules of the Building adopted and altered by Landlord from time to time and will cause all of its agents, employees, invitees and visitors to do so; all changes to such rules will be sent by Landlord to Tenant in writing. The initial rules for the Building are described in Exhibit A of the attached and incorporated Master Lease, and further incorporated herein for all purposes.

14. **Damage and Destruction**.

Subject to Section 8 A. above, if the Leased Premises or any part thereof or any appurtenance thereto is so damaged by fire, casualty or structural defects that the same cannot be used for Tenant's purposes, then Tenant shall have the right within ninety (90) days following damage to elect by notice to Landlord to terminate this Lease as of the date of such damage. In the event of minor damage to any part of the Leased Premises, and if such damage does not render the Leased Premises unusable for Tenant's purposes. Landlord shall promptly repair such damage at the cost of the Landlord. In making the repairs called for in this paragraph, Landlord shall not be liable for any delays resulting from strikes, governmental restrictions, inability to obtain necessary materials or labor or other matters which are beyond the reasonable control of Landlord. Tenant shall be relieved from paying rent and other charges during any portion of the Lease term that the Leased Premises are inoperable or unfit for occupancy, or use, in whole or in part, for Tenant's purposes. Rentals and other charges paid in advance for any such periods shall be credited on the next ensuing payments, if any, but if no further payments are to be made, any such advance payments shall be refunded to Tenant. The provisions of this paragraph extend not only to the matters aforesaid, but also to any occurrence which is beyond Tenant's reasonable control and which renders the Leased Premises, or any appurtenance thereto, inoperable or unfit for occupancy or use, in whole or in part, for Tenant's purposes.

15. **Default**.

If default shall at any time be made by Tenant in the payment of rent when due to Landlord as herein provided, and if said default shall continue for fifteen (15) days after written notice thereof shall have been given to Tenant by Landlord, or if default shall be made in any of the other covenants or conditions to be kept, observed and performed by Tenant, and such default shall continue for thirty (30) days after notice thereof in writing

to Tenant by Landlord without correction thereof then having been commenced and thereafter diligently prosecuted, Landlord may declare the term of this Lease ended and terminated by giving Tenant written notice of such intention, and if possession of the Leased Premises is not surrendered. Landlord may reenter said premises. Landlord shall have, in addition to the remedy above provided, any other right or remedy available to Landlord on account of any Tenant default, either in law or equity. Landlord shall use reasonable efforts to mitigate its damages.

16. **Quiet Possession**.

Subject to any provisions of the Master Lease, Landlord covenants and warrants that upon performance by Tenant of its obligations hereunder, Landlord will keep and maintain Tenant in exclusive, quiet, peaceable and undisturbed and uninterrupted possession of the Leased Premises during the term of this Lease.

17. **Condemnation**.

If any legally, constituted authority condemns the Building or such part thereof which shall make the Leased Premises unsuitable for leasing, this Lease shall cease when the public authority takes possession, and Landlord and Tenant shall account for rental as of that date. Such termination shall be without prejudice to the rights of either party to recover compensation from the condemning authority for any loss or damage caused by the condemnation. Neither party shall have any rights in or to any award made to the other by the condemning authority.

18. **Subordination**.

Tenant accepts this Lease subject and subordinate to any mortgage, deed of trust, operation of the Master Lease, or other lien presently existing or hereafter arising upon the Leased Premises, or upon the Building and to any renewals, refinancing and extensions thereof, but Tenant agrees that any such mortgagee shall have the right at any time to subordinate such mortgage, deed of trust or other lien to this Lease on such terms and subject to such conditions as such mortgagee may deem appropriate in its discretion. Landlord is hereby irrevocably vested with full power and authority to subordinate this Lease to any mortgage, deed of trust or other lien now existing or hereafter placed upon the Leased Premises of the Building, and Tenant agrees upon demand to execute such further instruments subordinating this Lease to the holder of any such liens as Landlord may request. In the event that Tenant should fail to execute any instrument of subordination herein required to be executed by Tenant promptly as requested, Tenant hereby irrevocably constitutes Landlord as its attorney-in-fact to execute such instrument in Tenant’s name, place and stead, it being agreed that such power is one coupled with an interest. Tenant agrees that it will from time to time upon request by Landlord execute and deliver to such persons as Landlord shall request a statement in recordable form certifying that this Lease is unmodified and in full force and effect (or if there have been modifications, that the same is in full force and effect as so modified), stating the dates to which rent and other charges payable under this Lease have been paid, stating that

Landlord is not in default hereunder (or if Tenant alleges a default stating the nature of such alleged default) and further stating such other matters as Landlord shall reasonably require.

19. **Notice**.

Any notice required or permitted under this Lease shall be deemed sufficiently given or served if sent by United States certified mail, return receipt requested, addressed as follows:

If to Landlord to:

SNBL USA Ltd.

6605 Merrill Creek Parkway

Everett, WA 98203

If to Tenant to:

Ontorii, Inc.

419 Western Ave.

Boston MA 02135

Landlord and Tenant shall each have the right from time to time to change the place notice is to be given under this paragraph by written notice thereof to the other party.

21. **Brokers**.

Tenant represents that Tenant was not shown the Premises by any real estate broker or agent and that Tenant has not otherwise engaged in, any activity which could form the basis for a claim for real estate commission, brokerage fee, finder's fee or other similar charge, in connection with this Lease.

22. **Waiver**.

No waiver of any default of Landlord or Tenant hereunder shall be implied from any omission to take any action on account of such default if such default persists or is repeated, and no express waiver shall affect any default other than the default specified in the express waiver and that only for the time and to the extent therein stated. One or more waivers by Landlord or Tenant shall not be construed as a waiver of a subsequent breach of the same covenant, term or condition.

23. **Memorandum of Lease**.

The parties hereto contemplate that this Lease should not and shall not be filed for record, but in lieu thereof, at the request of either party, Landlord and Tenant shall execute a Memorandum of Lease to be recorded for the purpose of giving record notice of the appropriate provisions of this Lease.

24. **Headings**.

The headings used in this Lease are for convenience of the parties only and shall not be considered in interpreting the meaning of any provision of this Lease.

25. **Successors**.

The provisions of this Lease shall extend to and be binding upon Landlord and Tenant and their respective legal representatives, successors and assigns.

26. **Consent**.

Landlord shall not unreasonably withhold or delay its consent with respect to any matter for which Landlord's consent is required or desirable under this Lease. Tenant agrees to cooperate reasonably with Landlord in executing such documents or amendments to this Lease to effectuate the intended purpose of providing the leased space to Tenant at pro-rata pass-through costs from the Master Lease, including but not limited to renegotiation of payment terms, obligations and duties to conform with any requirement under the Master Lease.

27. **Compliance with Law**.

Tenant shall comply with all laws, orders, ordinances and other public requirements now or hereafter pertaining to Tenant's use of the Leased Premises. Landlord shall comply with all laws, orders, ordinances and other public requirements now or hereafter affecting the Leased Premises.

28. **Final Agreement**.

This Agreement terminates and supersedes all prior understandings or agreements on the subject matter hereof. This Agreement may be modified only by a further writing that is duly executed by both parties.

29. **Governing Law**.

This Agreement shall be governed, construed and interpreted by, through and under the Laws of the Commonwealth of Massachusetts.

IN WITNESS WHEREOF, the parties have executed this Lease as of the day and year first above written.

SNBL USA, LTD.		ONTORII, INC.	
By:	/s/ Hideshi Tsusaki	By:	/s/ Gregory L. Verdine
Name:	Hideshi Tsusaki, DVM, PhD	Name:	Dr. Gregory L. Verdine
Title:	President & COO	Title:	President
Date:	3/17/2010	Date:	3/15/2010

Exhibit 10.5

Amendment 1 to the Commercial Lease Agreement

This Amendment 1 to the Commercial Lease Agreement ("Lease") is made and effective July 1, 2011, by and between SNBL USA, Ltd. a Washington Corporation having a notice address of 6605 Merrill Creek Parkway, Everett, WA 98203 ("Landlord") and Ontorii, Inc., a Delaware corporation having a notice address of 419 Western Ave. Boston MA 02135 ("Tenant").

RECITALS

Landlord has made available for lease a portion of the Premises located at 419 Western Avenue, Boston, MA 02135 ("Premises"), comprising a total of approximately 3850 sf. which Tenant currently occupies. Landlord has also made available, as shared space in common, to share and share alike, an additional 408 sf. designated as "Conference Room Small" (approx 90sf), "Conference Room Large (approx. 188 sf) and "Common Lobby Area" (approx. 130 sf) (together the "Leased Premises" of approximately 4258 sf). "Ontorii's Proportionate Share" of the Premises under the current sublease was thus Ninety Seven and 93/100 percent, determined by the ratio of leased space to total space: 4258/4348.

Now, however, Tenant desires to sublease the entirety of the space, including the additional areas, for a total of one hundred percent (100%) of the facilities for the remainder of the term of this Sublease, and Landlord hereby consents to such extension of the portion of the facilities to be subleased.

THEREFORE, in consideration of the mutual promises herein, contained and other good and valuable consideration, it is agreed:

1. **Term**.

A. Landlord hereby leases the Leased Premises in its entirety to Tenant, and Tenant hereby leases the same from Landlord, for the remainder of the "Lease Term" as defined in the Master Lease which has been previously provided to Tenant, the terms of which have not changed.

B. Tenant may renew this Lease, including the Amendments thereto, subject to Landlord's availability under the Master Lease, and upon Tenant giving reasonable advance notice to Landlord of intent to so extend, such notice no later than Landlord's required notice under the Master Lease. The renewal term shall be at the rental set forth below and otherwise upon the same covenants, conditions and provisions as provided in this Lease.

2. **Rental and Other Payments**.

A. Tenant shall pay to Landlord during the Term rental of $69,568.00 per year, payable in installments of $5,797.33 per month commencing on July 1, 2011. Such rent

represents Landlord's Basic Rent of $69,568.00 per annum ($5,797,33/month) under the Master Lease. Each installment payment shall be due in advance on the first day of each calendar month during the lease term to Landlord at 6605 Merrill Creek Parkway, Everett WA 98203 or at such other place designated by written notice from Landlord or Tenant. The rental payment amount for any partial calendar months included in the lease term shall be prorated on a daily basis.

B. Tenant shall also pay Landlord any and all. Additional Rents (as defined and calculated in the Master Lease) times Ontorii's Proportional Share, Such payments shall be made as defined in section 2A above. Landlord shall notify Tenant of changes to such additional rents when received as described by the Master Lease.

C. Tenant shall also pay Landlord, on a monthly basis, the sum of $1,011,300.25 in 112 monthly installments in the manner described in section 2A of $9,029.47 representing Tenant's cost of premises improvements made by Landlord. This monthly obligation survives any termination of this Lease and/or abandonment of the leased premises by Tenant.

D. The rental for any renewal lease term, if created as permitted under this Lease, shall be as defined to the Extension Term in the Master Lease payable in 12 equal installments as described in section 2A.

3. **Other Terms and Conditions.**

All other terms and conditions of the Sublease entered into on or about January 1, 2010 shall remain in full force and effect as if fully set forth herein.

IN WITNESS WHEREOF, the parties have executed this Lease as of the day and year first above written.

SNBL USA, LTD.		ONTORII, INC.	
By:	/s/ Hideyuki Hirama	By:	/s/ Gregory L. Verdine
Name:	Hideyuki Hirama. MA	Name:	Dr. Gregory L. Verdine
Title:	Senior Vice President & CFO	Title:	President
Date:	Aug 29, 2011	Date:	August 15, 2011

733 CONCORD AVENUE
CAMBRIDGE, MASSACHUSETTS

LEASE SUMMARY SHEET

Execution Date:	April 6, 2015
Tenant:	WaVe Life Sciences USA, Inc., a Delaware corporation
Tenant's Mailing Address Prior to Occupancy:	419 Western Avenue Boston, MA 02135 Attn: Paul B. Bolno and Kyle Moran Email address: With a copy to: Mintz Levin Cohn Ferris Glovsky and Popeo, P.C. One Financial Center Boston, Massachusetts 02111 Attn: Stuart A. Offner, Esq.
Landlord:	King 733 Concord LLC, a Delaware limited liability company
Building:	733 Concord Avenue, Cambridge, Massachusetts. The Building consists of one and two stories, and contains approximately 44,019 rentable square feet. The land on which the Building is located (the "**Land**") is more particularly described in Exhibit 2 attached hereto and made a part hereof (such land, together with the Building, are hereinafter collectively referred to as the "**Property**").
Premises:	Approximately 30,893 rentable square feet of space in the Building, comprised of an area ("**First Floor Premises**") containing approximately 25,911 rentable square feet located on the first (1st)floor of the Building and an area ("**Mezzanine Premises**") containing approximately 4,982 rentable square feet located on the mezzanine level of the Building. The First Floor Premises and the Mezzanine Premises are referred to collectively herein as the "**Premises**", and are shown the Lease Plans attached hereto and made a part hereof as Exhibits 1A and Exhibit 1B (the "**Lease Plan**"). Landlord and Tenant stipulate and agree that the Rentable Square Footage of the Building and the Rentable Square Footage of the Premises are correct and shall not be remeasured.

Term Commencement Date:	The earlier of: (i) the date that Tenant first commences to use the Premises, or any portion thereof, for any Permitted Use, or (ii) the later of: (x) August 15, 2015, or (y) Substantial Completion of Landlord's Work, as defined in Section 3.2. The parties estimate that the Term Commencement Date will occur on or about the date ("**Estimated Term Commencement Date**") which is five (5) months after the date of execution and delivery of this Lease by both parties. The installation of Tenant's furniture, fixtures and equipment in the Premises shall not be deemed to be "use of the Premises for any Permitted Use for the purposes of the definition of the Term Commencement Date.
Expiration Date:	The date that is seven (7) years and six (6) months following the Term Commencement Date; except that if the Term Commencement Date does not occur on the first day of a calendar month, then the Expiration Date shall be the last day of the calendar month in which the date which is seven (7) years and six (6) months following the Term Commencement Date occurs.
Extension Term:	Subject to Section 1.2 below, one (1) extension term of five (5) years.
Permitted Uses:	Subject to Legal Requirements (hereinafter defined), the following uses: *Contemplated Uses*: General office, research, development and laboratory use, in accordance with applicable Environmental Laws (hereinafter defined), and other ancillary uses related to the foregoing; and *Other Uses*: Provided that Tenant obtains Landlord's prior written consent, which consent shall not be unreasonably withheld, any other lawfully permitted uses.

Base Rent:	LEASE YEAR[1]	ANNUAL BASE RENT	MONTHLY PAYMENT
	1	$ 800,000.00	$ 66,666.67
	2	$ 936,000.00	$ 78,000.00
	3	$ 1,311,098.92	$ 109,258.24
	4	$ 1,350,333.03	$ 112,527.75
	5	$ 1,390,802.86	$ 115,900.24
	6	$ 1,432,508.41	$ 119,375.70
	7	$ 1,475,559.68	$ 122,954.14
	8	$ 1,519,626.67*	$ 126,635.56
		*annualized	

Operating Costs and Taxes: See Sections 5.2 and 5.3

Tenant's Share: A fraction, the numerator of which is the number of rentable square feet in the Premises and the denominator of which is the number of rentable square feet in the Building. As of the Execution Date, Tenant's Share is 70.18%.

Security Deposit/ Letter of Credit: $1,000,000.00, subject to reduction in accordance with Section 7.6.

Event of Default: A default by Tenant, after the giving of any required notice by Landlord and the expiration of any applicable grace periods, as more particularly set forth in Section 20.1 of the Lease.

Guarantor: None

EXHIBIT lA	LEASE PLAN OF FIRST FLOOR PREMISES—1ST FLOOR
EXHIBIT 1B	LEASE PLAN OF MEZZANINE PREMISES—MEZZANINE
EXHIBIT 1C	ROOFTOP PREMISES—ROOF
EXHIBIT 2	LEGAL DESCRIPTION
EXHIBIT 3	WORK LETTER
EXHIBIT 3-1	BASE BUILDING WORK
EXHIBIT 3-2	INITIAL PLAN
EXHIBIT 3-3	EQUIPMENT LIST
EXHIBIT 3-4	LANDLORD/TENANT RESPONSIBILITY MATRIX
EXHIBIT 4	PARKING AREAS
EXHIBIT 5	FORM OF LETTER OF CREDIT
EXHIBIT 6	LANDLORD'S SERVICES
EXHIBIT 7-1	FORM OF CONSENT TO ASSIGNMENT
EXHIBIT 7-2	FORM OF CONSENT TO SUBLEASE
EXHIBIT 8-1	APPROVED TENANT'S HAZARDOUS MATERIALS
EXHIBIT 8-2	ENVIRONMENTAL ASSESSMENT REPORT
EXHIBIT 9	RULES AND REGULATIONS
EXHIBIT 10	TENANT WORK INSURANCE SCHEDULE

[1] For the purposes of this Lease, the first "**Lease Year** shall be defined as the period commencing as of the Term Commencement Date and ending on the last day of the month in which the first (1st) anniversary of the Tenn Commencement Date occurs; provided, however, that if the Term Commencement Date occurs on the first day of a calendar month, then the first Lease Year shall expire on the day immediately preceding the first (1st) anniversary of the Term Commencement Date. Thereafter, "Lease Year" shall be defined as any subsequent twelve (12) month period during the term of this Lease.

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THIS INDENTURE OF LEASE (this "**Lease**") is hereby made and entered into on the Execution Date by and between Landlord and Tenant.

Each reference in this Lease to any of the terms and titles contained in any Exhibit attached to this Lease shall be deemed and construed to incorporate the data stated under that term or title in such Exhibit. All capitalized terms not otherwise defined herein shall have the meanings ascribed to them as set forth in the Lease Summary Sheet which is attached hereto and incorporated herein by reference.

1. LEASE GRANT; TERM; APPURTENANT RIGHTS; EXCLUSIONS

1.1 Lease Grant. Landlord hereby leases to Tenant, and Tenant hereby leases from Landlord, the Premises upon and subject to terms and conditions of this Lease, for a term of years commencing on the Term Commencement Date and, unless earlier terminated or extended pursuant to the terms hereof, ending on the Expiration Date (the "**Initial Term**"; the Initial Term and any duly exercised Extension Terms are hereinafter collectively referred to as the "**Term**").

1.2 Extension Term.

(a) Provided that the following conditions, which may be waived by Landlord in its sole discretion, are satisfied (i) Tenant, an Affiliated Entity (hereinafter defined) and/or a Successor (hereinafter defined) is/are then occupying at least fifty percent (50%) of the Premises; and (ii) no Event of Default nor an event which, with the passage of time and/or the giving of notice would constitute an Event of Default has occurred and is continuing (1) as of the date of the Extension Notice (hereinafter defined), and (2) at the commencement of the Extension Term (hereinafter defined), Tenant shall have the option to extend the Term for one (1) additional term of five (5) years ("**Extension Term**"), such Extension Term commencing as of the day immediately following the expiration of the Initial Term. Tenant must exercise its option to extend, if at all, by giving Landlord written notice (the "**Extension Notice**") on or before the date that is nine (9) months prior to the expiration of the Initial Term of this Lease, *time being of the essence*. Upon the timely giving of such notice, the Term shall be deemed extended for the Extension Term upon all of the terms and conditions of this Lease, without the need for further act or deed of either party, except that Base Rent during such Extension Term shall be calculated in accordance with this Section 1.2, Landlord shall have no obligation to construct or renovate the Premises, and Tenant shall have no further right to extend the Term other than the single Extension Term provided above. If Tenant fails to give timely notice, as aforesaid, Tenant shall have no further right to extend the Term. Notwithstanding the fact that Tenant's proper and timely exercise of such option to extend the Term shall be self executing, the parties shall promptly execute a lease amendment reflecting the Extension Term after Tenant exercises such option. The execution of such lease amendment shall not be deemed to waive any of the conditions to Tenant's exercise of its rights under this Section 1.2.

(b) The Base Rent payable by Tenant with respect to the Extension Term (the "**Extension Term Base Rent**") shall be determined in accordance with the process described hereafter. Extension Term Base Rent payable by Tenant with respect to the Extension Term shall be the fair market rental value of the Premises then demised to Tenant as of the commencement of the Extension Term as determined in accordance with the process described below, for

renewals of combination laboratory and office space in the Alewife area of Cambridge, Massachusetts, of equivalent quality, size, utility and location, with the length of the Extension Term, the credit standing of Tenant and all other relevant factors to be taken into account, including, without limitation, any concessions granted to tenants in the marketplace (such as, without limitation, free rent, free parking, tenant improvement allowances, lease assumptions, and moving and other allowances) and proximity to public transportation. Within thirty (30) days after receipt of the Extension Notice, Landlord shall deliver to Tenant written notice of its determination of the Extension Term Base Rent for the Extension Term. Tenant shall, within thirty (30) days after receipt of such notice, notify Landlord in writing whether Tenant accepts or rejects Landlord's determination of the Extension Term Base Rent ("**Tenant's Response Notice**"). If Tenant fails timely to deliver Tenant's Response Notice, then Landlord shall send Tenant a written reminder notice ("**Reminder Notice**"), specifically referring to this Section 1.2(b) and advising Tenant of the effect of failing to send a timely Tenant's Response Notice, and if Tenant fails to deliver a Tenant's Response to Notice to Landlord on or before the date ten (10) days after Tenant receives a Reminder Notice, then Landlord's determination of the Extension Term Base Rent shall be binding on Tenant.

(c) If and only if Tenant's Response Notice is timely delivered to Landlord and indicates both that Tenant rejects Landlord's determination of the Extension Term Base Rent and desires to submit the matter to arbitration, then the Extension Term Base Rent shall be determined in accordance with the procedure set forth in Section 1.2(d).

(d) If, pursuant to the provisions of this Section 1.2, a dispute as to fair market rental value is to be submitted to appraisal, then, on or before the date ("**Appraiser Designation Date**") twenty (20) days after receipt by Landlord of Tenant's Response Notice indicating Tenant's desire to submit the determination of the Extension Term Base Rent to arbitration, Tenant and Landlord shall each notify the other, in writing, of their respective selections of an appraiser (respectively, "**Landlord's Appraiser**" and "**Tenant's Appraiser**"). Landlord's Appraiser and Tenant's Appraiser shall then jointly select a third appraiser (the "**Third Appraiser**") within ten (10) days of their appointment. All of the appraisers selected shall be individuals with at least ten (10) consecutive years' commercial appraisal experience in the area in which the Premises are located, shall be members of the Appraisal Institute (M.A.I.), and, in the case of the Third Appraiser, shall not have acted in any capacity for either Landlord or Tenant within five (5) years of his or her selection. The three appraisers shall determine the Extension Term Base Rent in accordance with the requirements and criteria set forth in Section 1.2(b) above, employing the method commonly known as Baseball Arbitration, whereby Landlord's Appraiser and Tenant's Appraiser each sets forth its determination of the Extension Term Base Rent as defined above, and the Third Appraiser must select one or the other (it being understood that the Third Appraiser shall be expressly prohibited from selecting a compromise figure). Landlord's Appraiser and Tenant's Appraiser shall deliver their determinations of the Extension Term Base Rent to the Third Appraiser within five (5) days of the appointment of the Third Appraiser and the Third Appraiser shall render his or her decision within ten (10) days after receipt of both of the other two determinations of the Extension Term Base Rent. The Third Appraiser's decision shall be binding on both Landlord and Tenant. Each party shall bear the cost of its own appraiser and the cost of the Third Appraiser shall be shared equally by the parties.

1.3 Appurtenant Rights.

(a) Common Areas. Subject to the terms of this Lease and the Rules and Regulations (hereinafter defined), Tenant and its employees, invitees and licensees, shall have, as appurtenant to the Premises, rights to use in common with others entitled thereto, the following areas (such areas are hereinafter referred to as the "**Common Areas**"): (i) the common loading docks and the common shipping and receiving area, as shown on Exhibit 1A attached hereto, (ii) common walkways and driveways necessary for access to the Building, and (iii) other areas and facilities designated by Landlord from time to time for the common use of tenants of the Building; and no other appurtenant rights or easements

(b) Parking. During the Term, Landlord shall, subject to the terms hereof make available up to eighty (81) surface parking spaces for Tenant's exclusive use ("**Tenant's Parking Spaces**") located in the surface parking area serving the Property ("**Parking Area**"), in the locations shown on Exhibit 4 attached hereto, without any fee or charge (except that costs of maintenance and repair of the parking areas shall be included in Operating Costs). Landlord shall have no obligation to police the use of Tenant's Parking Spaces or to install any signage or markings identifying Tenant's Parking Spaces. Tenant may police the use of Tenant's Parking Spaces, subject to such procedures as are approved by Landlord in advance (which approval shall not be unreasonably withheld, conditioned, or delayed), and Tenant may install markings or signage on Tenant's Parking Spaces, provided that Tenant obtains Landlord's prior written approval, which approval shall not be unreasonably withheld, conditioned, or delayed.

Tenant shall have no right to hypothecate or encumber the Parking Spaces, and shall not sublet, assign, or otherwise transfer the Parking Spaces other than to employees of Tenant occupying the Premises or to a Successor (hereinafter defined), an Affiliated Entity (hereinafter defined) or a transferee pursuant to an approved Transfer under Section 13 of this Lease. Subject to Landlord's right to reserve parking for other tenants of the Building, said Parking Spaces will be on an unassigned, non-reserved basis, and shall be subject to such reasonable rules and regulations as may be in effect for the use of the parking areas from time to time. Handicap parking spaces must be honored.

1.4 Tenant's Access.

(a) From and after the Term Commencement Date and until the end of the Term, Tenant shall have access to the Premises twenty-four (24) hours a day, seven (7) days a week, 365 days per year, subject to Legal Requirements (hereinafter defined), Landlord's reasonable Building security requirements (provided that a copy of such security requirements have been provided to Tenant, the parties hereby acknowledging that Landlord has the right, from time to time, to revise such security requirements, on a reasonable basis), causes beyond Landlord's reasonable control, the Rules and Regulations, the terms of this Lease and matters of record as of the Execution Date. Tenant shall have the right to install a security system pertaining to the Premises (the "**Security System**"), provided that: (i) any work performed by Tenant in installing such system shall be performed in accordance with the provisions of this Lease (including, without limitation, Section 11 hereof), and (ii) Tenant shall provide to Landlord card keys to allow Landlord to access the Premises, subject to, and in accordance with, the provisions of this Lease.

(b) With Landlord's approval (which approval shall not be unreasonably withheld, conditioned or delayed), Tenant shall, subject to the provisions of this Section 1.4(b), have the right to access the Premises from and after the date that is fifteen (15) days prior to the Term Commencement Date, for purposes reasonably related to the planning, design and installation of the Tenant's Property (including, without limitation, Tenant's furniture, fixtures and telecommunications and other equipment), provided that such entry: (i) shall only be permitted so long as Tenant does not interfere (other than in a de minimis manner) with the performance of Landlord's Work, (ii) shall be at Tenant's sole risk, except, subject to Section 14.5, to the extent of damage to property or injury to persons caused by the negligence or willful misconduct of the Landlord Parties (hereinafter defined), and (iii) may only be made in accordance with, and subject to, the provisions of the Lease (including, without limitation, Section 11), except that Tenant shall have no obligation to pay Base Rent, Operating Expenses or Taxes during such entry. In the event that Tenant makes such early entry into the Premises, Tenant shall take necessary reasonable measures to ensure that Tenant's contractors cooperate in all commercially reasonable ways with Landlord's contractors to avoid any delay in either Landlord's Work or any conflict with the performance of Landlord's Work, Tenant acknowledging that in the case of conflict, the performance of Landlord's Work shall have priority. Tenant shall, prior to the first entry to the Premises pursuant to this Section 1.4(b), provide Landlord with certificates of insurance evidencing that the insurance required in Section 14 hereof is in full force and effect and covering any person or entity entering the Building. Tenant shall defend, indemnify and hold the Landlord Parties harmless from and against any and all Claims (hereinafter defined) for injury to persons or damage to property to the extent resulting from or relating to Tenant's access to and use of the Premises prior to the Term Commencement Date as provided under this Section 1.4(b), except to the extent such injury or damage is caused by the negligence or willful misconduct of any of the Landlord Parties. Tenant shall coordinate any access to the Premises prior to the Term Commencement Date with Landlord's property manager.

1.5 Exclusions. The following are expressly excluded from the Premises and reserved to Landlord: all the perimeter walls of the Premises (except the inner surfaces thereof), the Common Areas and any sinks located therein, and any space in or adjacent to the Premises used exclusively by parties other than the Tenant Parties for shafts, stacks, pipes, conduits, wires and appurtenant fixtures, fan rooms, ducts, electric or other utilities or other Building facilities, and the use of all of the foregoing, except as expressly permitted pursuant to Section 1.3(a) above.

1.6 Rooftop Use. During the Term, Tenant shall have the right, at no cost to Tenant (except that costs of maintenance and repair of the Rooftop Premises shall be included in Operating Costs) to use a portion of the Rooftop Premises of the Building in the location shown on Exhibit 1C (the "**Rooftop Premises**") for the installation of certain equipment approved by Landlord (which approval shall not be unreasonably withheld) and purchased and installed by or for Tenant in accordance with the terms of this Lease (any equipment installed by or for Tenant within the Rooftop Premises, as the same may be modified, altered or replaced during the Term, is collectively referred to herein as "**Tenant's Rooftop Premises Equipment**"). Landlord's approval of such equipment shall not be unreasonably withheld, conditioned or delayed provided Tenant demonstrates to Landlord's reasonable satisfaction that the proposed equipment (i) does not interfere with any base building equipment operated by Landlord on the roof; (ii) will not

affect the structural integrity of the Building or impact the roof or the roof membrane in any manner; (iii) shall be adequately screened so as to minimize the visibility of such equipment; and (iv) shall be adequately sound-proofed to meet all requirements of Legal Requirements and Landlord's specified maximum decibel levels for equipment operations. Tenant shall not install or operate Tenant's Rooftop Premises Equipment until Tenant has obtained and submitted to Landlord copies of all required governmental permits, licenses, and authorizations necessary for the installation and operation thereof. In addition, Tenant shall comply with all reasonable construction rules and regulations promulgated by Landlord in connection with the installation, maintenance and operation of Tenant's Rooftop Premises Equipment. Landlord shall have no obligation to provide any services including, without limitation, electric current or gas service, to the Rooftop Premises or to Tenant's Rooftop Premises Equipment. Notwithstanding the foregoing, Tenant may cause such services to be provided to the Rooftop Premises and/or any Tenant's Rooftop Premises Equipment subject to the provisions hereof (including, without limitation, the provisions of Section 11 of the Lease). Tenant shall be responsible for the cost of repairing and maintaining Tenant's Rooftop Premises. Equipment and the cost of repairing any damage to the Building (except to the extent, subject to Section 14.5, that such damage is caused by the negligence or willful misconduct of any of the Landlord Parties), or the cost of any necessary improvements to the Building, caused by or as a result of the installation, replacement and/or removal of Tenant's Rooftop Premises Equipment. Landlord makes no warranties or representations to Tenant as to the suitability of the Rooftop Premises for the installation and operation of Tenant's Rooftop Premises Equipment. In the event that at any time during the Term, Landlord determines, in its sole but bona fide business judgment, that the operation and/or periodic testing of Tenant's Rooftop Premises Equipment interferes with the operation of the Building or the business operations of any of the occupants of the Building, then Tenant shall, upon notice from Landlord, cause all further testing of Tenant's Rooftop Premises Equipment to occur after normal business hours (hereinafter defined).

1.7 Tenant's Right of First Offer. See **Exhibit 10.**

2. RIGHTS RESERVED TO LANDLORD

2.1 Additions and Alterations. Landlord reserves the right, at any time and from time to time, but upon prior written notice to Tenant (except that: (i) email notice shall be sufficient for the purposes of this Section 2.1, and (ii) no prior notice shall be required in an emergency) to make such changes, alterations, additions, improvements, repairs or replacements in or to the Property (including the Premises but, with respect to the Premises, only for purposes of repairs, maintenance, replacements and the exercise of any other rights expressly reserved to Landlord herein) and the fixtures and equipment therein, as well as in or to the street entrances and/or the Common Areas, as it may deem necessary or desirable, provided, however, that there be no material obstruction of permanent access to, or material interference with the use and enjoyment of, the Premises by Tenant. Subject to the foregoing, Landlord expressly reserves the right to temporarily close all, or any portion, of the Common Areas for the purpose of making repairs or changes thereto.

2.2 Additions to the Property.

(a) Landlord may at any time or from time to time (i) construct additional improvements and related site improvements (collectively, "**Future Development**") in all or any part of the Property and/or (ii) change the location or arrangement of any improvement outside the Building in or on the Property or all or any part of the Common Areas, or add or deduct any land to or from the Property; provided that, in connection with the exercise of the foregoing reserved rights: (i) Landlord shall have no right to relocate Tenant's Parking Spaces (except to the extent required by applicable Legal Requirements, (ii) there shall be material adverse affect on Tenant's use of, or access to, the Common Areas or the Premises, and (iii) there shall be no material increase in Tenant's obligations or material interference with, or material reduction to, Tenant's rights under this Lease.

(b) In case any excavation shall be made for building or improvements or for any other purpose upon the land adjacent to or near the Premises, Tenant will, upon prior written notice to Tenant (except that: (i) email notice shall be sufficient for the purposes of this Section 2.2(b), and (ii) no prior notice shall be required in an emergency) afford without charge to Landlord, or the person or persons, firms or corporations causing or making such excavation, license to enter upon the Premises for the purpose of doing such work as Landlord or such person or persons, firms or corporation shall deem to be necessary to preserve the walls or structures of the building from injury, and to protect the building by proper securing of foundations.

2.3 Name and Address of Building. Landlord reserves the right at any time and from time to time: (i) at Landlord's election, to change the name of the Building and/or the Property, and (ii) if required by governmental authorities, to change the address of the Building and/or the Property, provided Landlord gives Tenant at least three (3) months' prior written notice thereof and compensates Tenant for its reasonable, out-of-pocket costs of implementing such changes (e.g., replacement of letterhead and business cards). Notwithstanding the foregoing, in no event shall the name of the Building be changed, during the Term of this Lease, to be the name of another tenant of the Building.

2.4 Landlord's Access. Subject to the terms hereof, Tenant shall (a) upon reasonable advance written notice (Tenant hereby agreeing that email notice of at least 48 hours, (except that no notice shall be required in emergency situations), permit Landlord and any holder of a Mortgage (hereinafter defined) (each such holder, a "**Mortgagee**"), and the agents, representatives, employees and contractors of each of them, to have reasonable access to the Premises at all reasonable hours for the purposes of inspection as permitted pursuant to the provisions of this Lease or as necessary in order to enable Landlord to perform its obligations under this Lease, making repairs, replacements or improvements in or to the Premises or the Building or equipment therein (including, without limitation, sanitary, electrical, heating, air conditioning or other systems), complying with all applicable laws, ordinances, rules, regulations, statutes, by-laws, court decisions and orders and requirements of all public authorities, including the American with Disabilities Act (collectively, "**Legal Requirements**"), or exercising any right reserved to Landlord under this Lease (including without limitation the right to take upon or through the Premises all necessary materials, tools and equipment); and (b) permit Landlord and its agents and employees, at reasonable times, upon reasonable advance, notice of at least 48 hours, to show the Premises during normal business hours (i.e., Monday – Friday, 8 A.M. – 6 P.M., Saturday, 8 A.M. – 1 P.M., excluding "**Building Holidays**" (i.e., New

Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day)) to any prospective Mortgagee or purchaser of the Building and/or the Property or of the interest of Landlord therein, and, during the last twelve (12) months of the Term or at any time after the occurrence of an Event of Default, prospective tenants, and (c) for the purposes set forth in Section 17. In addition, to the extent that it is necessary to enter the Premises in order to access any area that serves any portion of the Building outside the Premises, then Tenant shall, upon as much advance notice as is practical under the circumstances, and in any event at least 48 hours' prior written notice (except that no notice shall be required in emergency situations), permit contractors engaged by other occupants of the Building to pass through the Premises in order to access such areas but only (except in emergencies) if accompanied by representatives of Landlord and Tenant and otherwise subject to the terms and conditions of Section 2.6. Notwithstanding anything to the contrary herein contained, if Landlord gives timely proper notice of its intent to access the Premises, as permitted hereunder, and Landlord's access is precluded by either Tenant's failure to make a Tenant representative available to permit such access or by reason of other provisions of this Section 2.4, then Landlord shall be temporarily relieved of responsibility to perform its obligations under the Lease only to the extent and for the period of time that Landlord is prevented from performing such obligations by reason of Landlord's lack of access to the Premises, or any portion thereof.

2.5 Pipes, Ducts and Conduits. Tenant shall permit Landlord to erect, use, maintain and relocate pipes, ducts and conduits in and through the Premises, provided the same do not materially reduce the floor area or materially adversely affect the appearance thereof and use and enjoyment of the Premises for Tenant's Permitted Uses.

2.6 Minimize Interference. Except in the event of an emergency, Landlord shall use commercially reasonable efforts to minimize any interference with Tenant's business operations and use and occupancy of the Premises in connection with the exercise any of the foregoing rights under this Section 2.

3. CONDITION OF PREMISES; CONSTRUCTION.

3.1 Condition of Premises. Except for Landlord's obligation to perform Landlord's Work (hereinafter defined), any warranties or representations made by Landlord which are expressly set forth in this Lease, Landlord's repair and maintenance obligations hereunder , Tenant acknowledges and agrees that Tenant is leasing the Premises in their "**AS IS**," "**WHERE IS**" condition and with all faults on the Term Commencement Date, without representations or warranties, express or implied, in fact or by law, of any kind, and without recourse to Landlord.

3.2 Landlord's Work.

(a) Subject to delays due to governmental regulation, unusual scarcity of or inability to obtain labor or materials, labor difficulties, Casualty or other causes reasonably beyond Landlord's control (collectively "**Landlord's Force Majeure**") and subject to any Tenant Delay, Landlord, at Landlord's sole cost and expense, shall perform the work ("**Landlord's Work**") in order to prepare the Premises for Tenant's occupancy in accordance Exhibit 3 attached hereto. Landlord shall use diligent efforts to substantially complete Landlord's Work by the Estimated Term Commencement Date. However, except to the extent

that such failure constitutes a delay in the occurrence of the Term Commencement Date (as provided in the definition of the Term Commencement Date), and, except for Tenant's remedies set forth in Section 3.3: (i) Tenant's sole remedies shall be a delay in the Term Commencement Date, (ii) except as expressly set forth in this Lease, Tenant shall have no claim or rights against Landlord, and Landlord shall have no liability or obligation to Tenant in the event of delay in Landlord's Work, and (iii) no delay in Landlord's Work shall have any effect on the parties rights or obligations under this Lease.

(b) **Definitions**.

(i) "**Tenant Delay**" shall mean any act or omission by Tenant and/or Tenant's agents, employees or contractors (collectively with Tenant, the "**Tenant Parties**") which causes an actual delay in the performance of Landlord's Work. Notwithstanding the foregoing, except where a Tenant Delay arises from Tenant's failure timely to act within on or before a date or time period expressly set forth in the Lease (in which event no Tenant Delay Notice shall be required): (x) in no event shall any act or omission be deemed to be a Tenant Delay until and unless Landlord has given Tenant written notice (the "**Tenant Delay Notice**") advising Tenant (a) that a Tenant Delay is occurring, and (b) of the basis on which Landlord has determined that a Tenant Delay is occurring, and (y) no period of time prior to the time that Tenant receives a Tenant Delay Notice shall be included in the period of time charged to Tenant pursuant to such Tenant Delay Notice.

(ii) "**Substantially complete**" or "**Substantial Completion**," when referring to Landlord's Work, shall mean that: (1) Landlord's Work is completed, other than minor work which does not materially affect Tenant's use of, or access to, the Premises, (2) the Premises (provided that Tenant complies with the restrictions on Tenant's use of the Mezzanine Premises, as set forth in Section 4.1 hereof) and those portions of the common areas of the Building which affect Tenant's occupancy are in conformance with all applicable building codes, permits, laws and regulations, including without limitation, ADA, (3) all structural elements and subsystems of the Building, including but not limited to HVAC, mechanical, electrical, lighting, plumbing, and life safety systems, will be in good working condition and repair, (4) Landlord has delivered to Tenant a certificate of substantial completion from Landlord's architect stating that Landlord's Work is substantially complete, and (5) such evidence as is customarily provided by the City of Cambridge to evidence its acceptance of Landlord's Work and Tenant's right to lawfully occupy the Premises (e.g., sign-offs on the Building permit by all applicable City of Cambridge departments or a certificate of occupancy, which may be a temporary certificate of occupancy) has been provided by the City of Cambridge. No costs incurred by Landlord in satisfying the definition of Substantial Completion shall be included in Operating Costs. Notwithstanding anything to the contrary herein contained, in the event that Landlord's Work is delayed by reason of any Tenant Delay, then Landlord shall be deemed to have achieved Substantial Completion of Landlord's Work on the date that Landlord would have achieved Substantial Completion of Landlord's Work, but for such Tenant Delay.

(iii) **Punchlist**. Promptly following substantial completion of Landlord's Work, Landlord shall provide Tenant with a punchlist prepared by Landlord's architect (the "**Punchlist**") incorporating those items jointly identified by Landlord and Tenant during their joint inspection of Landlord's Work, of outstanding items (the "**Punchlist Items**"). Promptly after substantial completion of Landlord's Work, Landlord and Tenant shall jointly inspect the Premises. Subject to Landlord's Force Majeure and Tenant Delays, Landlord shall complete all Punchlist Items within thirty (30) days of the date of the Punchlist (other than seasonal items, such as landscaping, requiring a longer period), provided that Tenant reasonably cooperates in connection with the completion of such Punchlist Items.

(c) **Warranty Regarding Quality of Landlord's Work**. Subject to the terms of this Section 3.2(c), Landlord warrants that: (i) the materials and workmanship comprising Landlord's Work will comply with Legal Requirements (provided that Tenant complies with the restrictions on Tenant's use of the Mezzanine Premises, as set forth in Section 4.1 hereof), and (ii) (ii) the materials and workmanship comprising Landlord's Work be free from defects or deficiencies, and (iii) the HVAC system serving the Premises ("**Premises HVAC System**") will comply with Legal Requirements and be free from defects or deficiencies ("**Warranty Regarding Landlord's Work**"). Any portion of Landlord's Work or the Premises HVAC System not conforming to the previous sentence may be considered defective. The Warranty Regarding Landlord's Work excludes remedy for damage caused by abuse by any of the Tenant Parties or modifications not made by Landlord or any Landlord Parties or improper or insufficient maintenance by Tenant, it being understood and agreed that normal wear and tear and normal usage are not deemed defects or deficiencies. Landlord agrees that it shall, without cost to Tenant, correct any portion of Landlord's Work which is found to be defective promptly following the date that Tenant gives Landlord written notice (a "**Defect Notice**") of such defective condition, provided that the Defect Notice is delivered to Landlord on or before the date (the "**Warranty Expiration Date**") that is three hundred sixty (360) days following the substantial completion of the applicable phase of Landlord's Work, *time being of the essence*, it being understood and agreed that there shall be a separate Warranty Expiration Date for each phase of Landlord's Work. The cost of repairing such defective work shall not be included in Operating Costs. Landlord's obligations under this Section 3.2(c) shall expire on the Warranty Expiration Date and be of no further force and effect except with respect to any defects or deficiencies in Landlord's Work disclosed in any Defect Notice delivered before the Warranty Expiration Date. In addition to and notwithstanding the foregoing, Landlord hereby agrees to use reasonable efforts to enforce its warranties against any contractor performing any portion of Landlord's Work.

(d) **Tenant's Sole Remedies**. The remedies set forth under Section 3.2(c) above set forth Tenant's sole remedies, both at law and in equity with respect to any breach of the Warranty Regarding Landlord's Work; provided however, that nothing in Section 3.2 shall be deemed to limit Landlord's obligations for maintenance and repair in accordance with Section 10.2 of the Lease.

3.3 Tenant's Remedies in the Event of Delays in Term Commencement Date.

(a) Rent Credit in Connection with a Delay in Term Commencement Date.

(i) *Initial Rent Credit Date*. If the Term Commencement Date occurs between the Initial Rent Credit Date (defined below) and the Second Rent Credit Date (defined below), inclusive, then Tenant shall be entitled to a credit against Tenant's obligation to pay Base Rent following the Term Commencement Date equal to one (1) day of Base Rent for each day between the Initial Rent Credit Date and the date of Substantial Completion of Landlord's Work.

(ii) *Second Rent Credit Date*. If the date of Substantial Completion of Landlord's Work occurs after the Second Rent Credit Date, then Tenant shall be entitled to a credit against Tenant's obligation to pay Base Rent following the Term Commencement Date equal to the sum of: (x) thirty (30) days of Base Rent, plus (y) two days of Base Rent for each day between the Second Rent Credit Date and the date of Substantial Completion of Landlord's Work.

(iii) *Definitions*. The "**Initial Rent Credit Date**" shall mean the date thirty (30) days after the Estimated Term Commencement Date, provided, however, that the Initial Rent Credit Date shall be extended by the lesser of: (x) ninety (90) days, or (y) the length of any delays in Landlord's Work arising from delay by Landlord's Force Majeure (as defined in Section 3.2) occurring prior to the Initial Rent Credit Date. The "**Second Rent Credit Date**" shall mean sixty (60) days after the Estimated Term Commencement Date, provided, however, that the Second Rent Credit Date shall be extended by the lesser of: (x) ninety (90) days, or (y) the length of any delays in Landlord Work arising from delay by Landlord's Force Majeure (as defined in Section 3.2) occurring prior to the Second Rent Credit Date.

(b) *Termination Right*. If the Term Commencement Date has not occurred on or before the Outside Termination Date, as hereinafter defined, then Tenant shall have the right to terminate the Lease, which shall be exercisable by a written thirty (30) day termination notice given on or after the Outside Termination Date but before the date that the Term Commencement Date occurs,. If the Term Commencement Date occurs on or before the thirtieth (30th) day after Landlord receives such termination notice, Tenant's termination notice shall be deemed to be void and of no force or effect. If the Term Commencement Date does not occur on or before such thirtieth (30th) day, this Lease shall terminate and shall be of no further force or effect, and, except for provisions of the lease which are intended to survive termination of the Lease (e.g. indemnification provisions), neither party shall have any further obligation to the other party. For the purposes hereof, the "**Outside Termination Date**" shall be defined as four (4) months after the Estimated Term Commencement Date, provided however, that the Outside Date shall be extended by the lesser of: (x) ninety (90) days, or (y) the length of any delays in Landlord Work arising from delay by Landlord's Force Majeure (as defined in Section 3.2).

3.4 Financing Milestone.

(a) *Definitions*. For the purposes hereof:

(1) Financing Milestone. Landlord shall deemed to have achieved the "**Financing Milestone**" if Landlord closes a first mortgage loan in the amount of at least twelve ($12,000,000.00) Dollars.

(2) Outside Financing Date. The "**Outside Financing Date**" is the date fifty (50) days after the Execution Date.

(a) If Landlord does not achieve the Financing Milestone on or before the Outside Financing Date, then Tenant shall have the right, after the Outside Financing Date but on or before the date thirty (30) days after the Outside Financing Date, to give written notice to Landlord ("**Financing Termination Notice**") terminating the Lease. If the Financing Milestone is not achieved on or before the date ten (10) days after Landlord receives the Financing Termination Notice, then Landlord shall promptly return the Letter of Credit to Tenant, this Lease shall terminate, and, except for provisions of the lease which are intended to survive termination of the Lease (e.g. indemnification provisions), neither party shall have any further obligation to the other party. If the Financing Milestone occurs on or before the date ten (10) days after Landlord receives the Financing Termination Notice, then the Financing Termination Notice shall be void and without force or effect, and Tenant shall have no right to terminate the Lease pursuant to this Section 3.4.

3.5 Tenant's Early Access.

Except as otherwise provided in this Section 3.5, Tenant shall not be permitted to take possession of or enter the Premises prior to the Term Commencement Date without Landlord's permission. If Tenant takes possession of or enters the Premises before the Term Commencement Date, Tenant shall be subject to the terms and conditions of this Lease; provided, however, except for the cost of services requested by Tenant (e.g., after hours HVAC service), Tenant shall not be required to pay Rent for any entry or possession before the Term Commencement Date during which Tenant, with Landlord's approval, has entered, or is in possession of, the Premises for the sole purpose of performing improvements or installing furniture, equipment or other personal property. Landlord hereby agrees that Tenant has the right to enter the Premises fifteen (15) days prior to the Term Commencement Date, during normal business hours and without payment of Annual Base Rent, Tenant's Share of Operating Costs, or Tenant's Share of Taxes, to install its phone, data, and furniture systems in compliance with the terms of this Lease. Tenant shall perform any such work in such a manner as not to interfere, in other than a de minimus manner, with or delay the completion of the Landlord Work (defined in **Exhibit C**). Any such interference or delay shall constitute a Tenant Delay. Such right of entry shall be deemed a license from Landlord to Tenant, and any entry thereunder shall be at the risk of Tenant.

4. USE OF PREMISES

4.1 Permitted Uses. During the Term, Tenant shall use the Premises only for the Permitted Uses and for no other purposes. Service and utility areas (whether or not a part of the Premises) shall be used only for the particular purpose for which they are designed. Tenant shall keep the Premises equipped with appropriate safety appliances to the extent required by applicable laws or insurance requirements. Tenant acknowledges that the Mezzanine Premises will only be accessible by staircase. Therefore, Tenant covenants and agrees that it will not use the Mezzanine Premises for any use which would cause the Mezzanine Premises to be in violation of the Americans with Disabilities Act or any other law, ordinance or regulation controlling or relating to access to the Mezzanine Premises.

4.2 Prohibited Uses.

(a) Notwithstanding any other provision of this Lease, Tenant shall not use the Premises or the Building, or any part thereof, or suffer or permit the use or occupancy of the Premises or the Building or any part thereof by any of the Tenant Parties (i) in a manner which would violate any of the covenants, agreements, terms, provisions and conditions of this Lease; (ii) for any unlawful purposes or in any unlawful manner; (iii) which, in the reasonable judgment of Landlord (taking into account the use of the Building as a combination laboratory, research and development and office building and the Permitted Uses) shall (a) materially impair the appearance or reputation of the Building; (b) materially impair, interfere with or otherwise diminish the quality of any of the Building services or the proper and economic heating, cleaning, ventilating, air conditioning or other servicing of the Building or Premises, or the use or occupancy of any of the Common Areas; (c) occasion material discomfort, inconvenience or annoyance in any material respect (and Tenant shall not install or use any electrical or other equipment of any kind which, in the reasonable judgment of Landlord, will cause any such impairment, interference, discomfort, inconvenience, annoyance or injury), or cause any injury or damage to any occupants of the Premises or other tenants or occupants of the Building or their property; or (d) cause harmful air emissions, laboratory odors or noises or any unusual or other objectionable odors, noises or emissions to emanate from the Premises; (iv) in a manner which is inconsistent with the operation and/or maintenance of the Building as a first-class combination office, research, development and laboratory facility; (v) for any fermentation processes whatsoever; or (vi) in a manner which shall increase such insurance rates on the Building or on property located therein over that applicable when Tenant first took occupancy of the Premises hereunder.

(b) With respect to the use and occupancy of the Premises and the Common Areas, Tenant will not: (i) place or maintain any signage (except as set forth in Section 12.2 below), trash, refuse or other articles in any vestibule or entry of the Premises, on the footwalks or corridors adjacent thereto or elsewhere on the exterior of the Premises, nor obstruct any driveway, corridor, footwalk, parking area, mall or any other Common Areas; (ii) permit undue accumulations of or burn garbage, trash, rubbish or other refuse within or without the Premises; (iii) permit the parking of vehicles so as to interfere with: (x) the ability of others, entitled thereto, to park in the common parking areas, or (y) the use of any driveway, corridor, footwalk, or other Common Areas; (iv) receive or ship articles of any kind outside of those areas reasonably designated by Landlord; (v) conduct or permit to be conducted any auction, going out of business sale, bankruptcy sale (unless directed by court order), or other similar type sale in or connected with the Premises; or (vi) except for any disclosures required by applicable law or stock exchange rule, use the name of Landlord, or any of Landlord's affiliates in any publicity, promotion, trailer, press release, advertising, printed, or display materials without Landlord's prior written consent.

4.3 Chemical Safety Program. Tenant shall establish and maintain a chemical safety program administered by a licensed, qualified individual in accordance with the requirements of the Massachusetts Water Resources Authority ("**MWRA**") and any other applicable governmental authority. Tenant shall be solely responsible for all costs incurred in connection with such chemical safety program, and Tenant shall provide Landlord with such documentation as Landlord may reasonably require evidencing Tenant's compliance with the

requirements of (a) the MWRA and any other applicable governmental authority with respect to such chemical safety program pertaining to the Building and (b) this Section. Tenant shall obtain and maintain during the Term (i) any permit required by the MWRA ("**MWRA Permit**") and (ii) a wastewater treatment operator license from the Commonwealth of Massachusetts with respect to Tenant's use of any acid neutralization tank serving the Premises. Tenant shall not introduce anything into the acid neutralization tank serving the Premises, if any (x) in violation of the terms of the MWRA Permit, (y) in violation of applicable laws or (z) that would interfere with the proper functioning of any such acid neutralization tank.

5. RENT; ADDITIONAL RENT

5.1 Base Rent. During the Term, Tenant shall pay to Landlord Base Rent in equal monthly installments, in advance and without demand on the first day of each month for and with respect to such month. Unless otherwise expressly provided herein, the payment of Base Rent, additional rent and other charges reserved and covenanted to be paid under this Lease with respect to the Premises (collectively, "**Rent**") shall commence on the Fixed Term Commencement Date, and shall be prorated for any partial months. Rent shall be payable to Landlord or, if Landlord shall so direct in writing, to Landlord's agent or nominee, in lawful money of the United States which shall be legal tender for payment of all debts and dues, public and private, at the time of payment.

5.2 Operating Costs.

(a) "**Operating Costs**" shall mean all actual costs incurred and expenditures of whatever nature made by Landlord in the operation, management, repair, replacement, maintenance and insurance (including, without limitation, environmental liability insurance and property insurance on Landlord-supplied leasehold improvements for tenants, but not property insurance on tenants' equipment) of the Property or allocated to the Property, including without limitation all costs of labor (wages, salaries, fringe benefits, etc.) up to and including the Property manager, however denominated, any costs for utilities supplied to exterior areas and the Common Areas, and any costs for repair and replacements, cleaning and maintenance of exterior areas and the Common Areas, related equipment, facilities and appurtenances and HVAC equipment, security services, a management fee and other administrative costs paid to Landlord's property manager (not to exceed four percent (4%) of gross income of the Building), a commercially reasonable rental factor of Landlord's management office for the Property, which management office may be located outside the Property and which may serve other properties in addition to the Property (in which event such costs shall be equitably allocated among the properties served by such office), the cost of operating any amenities in the Property available to all tenants of the Property and any subsidy provided by Landlord for or with respect to any such amenity; the cost of the Common Area dumpster service. The cost of capital items shall, for the purposes of including the cost of such items in Operating Costs shall, in accordance with Section 5.2(g), be: (i) amortized over the useful life of such improvements ("**Amortization Period**"), except that the Amortization Period for the purposes of determining the Replacement Cost for Major HVAC Component (as defined in Section 10.1A) shall be the three and one-half year period commencing as of the date that Landlord completes the replacement of the Major HVAC Component in question, and (ii) subject to Section 5.2(b) below, included in Operating Costs. Operating Costs shall not include Excluded Costs (hereinafter defined).

(b) "**Excluded Costs**" shall be defined as (i) any ground rent, or any mortgage charges (including interest, principal, points and fees); (ii) leasing fees, brokerage commissions, advertising and promotional expenses, legal fees, the cost of tenant improvements, build out allowances, moving expenses, assumption of rent under existing leases and other concessions incurred in connection with leasing space in the Building; (iii) salaries of executives and owners not directly employed in the management/operation of the Property and salaries and other compensation of employees, officers, executives or administrative personnel of Landlord above the position of building manager; (iv) the cost of work done by Landlord for a particular tenant, and the cost of work or services performed for any facility other than the Building or the Property; (v) the cost of items incurred by Landlord performing maintenance, repair, or replacement of the structure elements of the Building, including the structural portions of the roof (the parties expressly agreeing that costs relating to the maintenance, repair or replacement of the roof membrane shall not be deemed to be excluded from Operating Costs pursuant to the provisions of this clause (v)), structural columns, floor slab and exterior walls; (vi) the costs of Landlord's Work and any contributions made by Landlord to any tenant of the Property in connection with the build-out of its premises; (vii) franchise or income taxes imposed on Landlord; (viii) costs paid directly by individual tenants to suppliers, including tenant electricity, telephone and other utility costs; (ix) increases in premiums for insurance when such increase is caused by the use of the Building by Landlord or any other tenant of the Building; (x) depreciation of the Building, or any part thereof; (xi) costs relating to maintaining Landlord's existence as a corporation, partnership or other entity; (xii) advertising, promotional or marketing expenses for the Building; (xiii) the cost of repairs incurred by reason of fire or other casualty or condemnation in excess of costs which are included in any commercially reasonable deductible carried by Landlord under its casualty insurance policy (the parties hereby acknowledging that, as of the Execution Date, $10,000 is a commercially reasonable deductible), and the cost of any items for which Landlord is reimbursed by insurance, condemnation awards, refund, rebate or otherwise (provided that the foregoing shall not apply to payments by any tenant of the Building on account of such tenants' share of Operating Cost and Tax pass-through or escalation over base-year provisions under their leases), and any expenses for repairs or maintenance to the extent covered by warranties, guaranties and service contracts; (xiv) costs incurred in connection with any disputes between Landlord and its employees, between Landlord and Building management, or between Landlord and other tenants or occupants; (xv) accrual or replacement of reserves for future repair or replacement costs; (xvi) any legal expenses arising out of any misconduct or negligence of Landlord or any person for which Landlord is responsible or arising out of dealings between any principals constituting Landlord or arising out of any leasing, sale, syndication, or financing of the Building or the Property or any part thereof or arising out of disputes with tenants, other occupants, or prospective tenants or occupants or out of the construction of the improvements on the Property; (xvii) cost and expense of Landlord's Work; (xviii) any amounts paid by Landlord for which reimbursement is made from any source, including without limitation any cost recovered under any warranty, guaranty or insurance policy maintained or held by Landlord (provided that the foregoing shall not apply to payments by any tenant of the Building on account of such tenants' share of Operating Cost and Tax pass-through or escalation over base-year provisions under their leases); (xix) any cost representing an amount paid for services or materials to a related person or entity to the extent such amount exceeds the amount that would be paid for such services or materials at the then existing market rates to an unrelated person or entity (provided however, that the provisions of this clause (xix) shall not

apply to or limit management or administrative fees, which for the avoidance of doubt shall be included in Operating Costs only to the extent as provided in Section 5.2(a) above); (xx) costs of any cleanup, containment, abatement, removal or remediation of asbestos or other substances regulated by applicable law, rule, regulation or ordinance and detrimental to the environment or to the health of occupants of the Property, including without limitation Hazardous Materials (as hereinafter defined); (xxi) any increase in the cost of insurance attributable to the particular activities of any tenant which increases the cost of any fire, extended coverage or any other insurance policy covering all or any portion of the Property; (xxii) the cost of acquisition of any sculpture, paintings or other objects of art; and (xxiii) any capital expenditures except those ("**Permitted Capital Expenditures**") which either: (a) are required by Legal Requirements which first become effective and applicable to the Property after the Commencement Date, (b) are reasonably projected by Landlord to achieve savings in Operating Expenses (i.e., taking into account the Annual Charge-Off included in Operating Expenses as the result of the capital expenditure in question, or (c) which constitute Replacement Cost for Major HVAC Components, as defined in Section 10.1A.

(c) **Payment of Operating Costs**. Commencing as of the Term Commencement Date and, subject to the last sentence of this Section 5.2(c), continuing thereafter throughout the remainder of the Term of the Lease, Tenant shall pay to Landlord, as additional rent, Tenant's Share of Operating Costs. Landlord may make a good faith estimate of Tenant's Share of Operating Costs for any fiscal year or part thereof during the Term, and Tenant shall pay to Landlord, on the Term Commencement Date and on the first (1st) day of each calendar month thereafter, an amount equal to Tenant's Share of Operating Costs for such fiscal year and/or part thereof divided by the number of months therein. Landlord may estimate and re-estimate Tenant's Share of Operating Costs and deliver a copy of the estimate or re-estimate to Tenant. Thereafter, the monthly installments of Tenant's Share of Operating Costs shall be appropriately adjusted in accordance with the estimations so that, by the end of the fiscal year in question, Tenant shall have paid all of Tenant's Share of Operating Costs as estimated by Landlord. Any amounts paid based on such an estimate shall be subject to adjustment as herein provided when actual Operating Costs are available for each fiscal year. As of the Execution Date, the Property's fiscal year is January 1 — December 31. Notwithstanding the foregoing, Operating Costs shall not include any cost of any Building repairs or replacements performed by Landlord during the ninety (90) day period commencing as of the Term Commencement Date, unless Tenant or any Tenant party is responsible for the cause of such repairs or replacements.

(d) Annual Reconciliation. Landlord shall, within one hundred twenty (120) days after the end of each fiscal year, deliver to Tenant a reasonably detailed statement of the actual amount of Operating Costs for such fiscal year ("**Year End Statement**"). Failure of Landlord to provide the Year End Statement within the time prescribed shall not relieve Tenant from its obligations hereunder. If the total of such monthly remittances on account of any fiscal year is greater than Tenant's Share of Operating Costs actually incurred for such fiscal year, then, Tenant may credit the difference against the next installment(s) of additional rent on account of Operating Costs due hereunder, except that if such difference is determined after the end of the Term, Landlord shall refund such difference to Tenant within thirty (30) days after such determination to the extent that such difference exceeds any amounts then due from Tenant to Landlord. If the total of such remittances is less than Tenant's Share of Operating Costs actually incurred for such fiscal year, Tenant shall pay the difference to Landlord, as additional rent

hereunder, within thirty (30) days of Tenant's receipt of an invoice therefor. Landlord's estimate of Operating Costs for the next fiscal year shall be based upon the Operating Costs actually incurred for the prior fiscal year as reflected in the Year-End Statement plus a reasonable adjustment based upon estimated increases in Operating Costs. The provisions of this Section 5.2(d) shall survive the expiration or earlier termination of this Lease.

(e) Part Years. If the Term Commencement Date or the Expiration Date occurs in the middle of a fiscal year, Tenant shall be liable for only that portion of the Operating Costs with respect to such fiscal year within the Term.

(f) Gross-Up. If, during any fiscal year, less than 100% of the Building is occupied by tenants or if Landlord was not supplying all tenants with the services being supplied to Tenant hereunder, actual Operating Costs incurred shall be reasonably extrapolated by Landlord on an item-by-item basis to the reasonable Operating Costs that would have been incurred if the Building was 100% occupied and such services were being supplied to all tenants, and such extrapolated Operating Costs shall, for all purposes hereof, be deemed to be the Operating Costs for such fiscal year. This "gross up" treatment shall be applied only with respect to variable Operating Costs arising from services provided to Common Areas or to space in the Building being occupied by tenants (which services are not provided to vacant space or may be provided only to some tenants) in order to allocate equitably such variable Operating Costs to the tenants receiving the benefits thereof.

(g) Capital Expenditures.

1. *Annual Charge-Off*. "**Annual Charge-Off**" shall be defined as the annual amount of principal and interest payments which would be required to repay a loan ("**Capital Loan**") in equal monthly installments over the Useful Life, as hereinafter defined, of the capital item in question on a level payment direct reduction basis at an annual interest rate equal to the Capital Interest Rate, as hereinafter defined, where the initial principal balance is the cost of the capital item in question. However, if Landlord reasonably concludes on the basis of engineering estimates that a particular capital expenditure will effect savings in Building operating costs including, without limitation, energy-related costs, and that such projected savings will, on an annual basis ("**Projected Annual Savings**"), exceed the Annual Charge-Off of such capital expenditure computed as aforesaid, then and in such event, the Annual Charge-Off shall be increased to an amount equal to the Projected Annual Savings; and in such circumstances, the increased Annual Charge-Off (in the amount of the Projected Annual Savings) shall be made for such period of time as it would take to fully amortize the cost of the capital item in question, together with interest thereon at the Capital Interest Rate as aforesaid, in equal monthly payments, each in the amount of one-twelfth (1/12th) of the Projected Annual Savings, with such payments being applied first to interest and the balance to principal.

2. *Useful Life*. "**Useful Life**" shall be reasonably determined by Landlord in accordance with generally accepted accounting principles and practices in effect at the time of acquisition of the capital item

3. *Capital Interest Rate*. "**Capital Interest Rate**" shall be defined as an annual rate of either one percentage point over the AA Bond rate (Standard & Poor's corporate

composite or, if unavailable, its equivalent) as reported in the financial press at the time the capital expenditure is made or, if the capital item is acquired through third-party financing, then the actual (including fluctuating) rate paid by Landlord in financing the acquisition of such capital item.

(h) Audit Right. Provided there is no Event of Default nor any event which, with the passage of time and/or the giving of notice would constitute an Event of Default, Tenant may, upon at least sixty (60) days' prior written notice, inspect or audit Landlord's records relating to Operating Costs for any periods of time within the previous fiscal year before the audit or inspection. However, no audit or inspection shall extend to periods of time before the Term Commencement Date. If Tenant fails to object to the calculation of Tenant's Share of Operating Costs on the Year-End Statement within ninety (90) days after such statement has been delivered to Tenant and/or fails to complete any such audit or inspection within two hundred forty (240) days after receipt of the Year End Statement, then Tenant shall be deemed to have waived its right to object to the calculation of Tenant's Share of Operating Costs for the year in question and the calculation thereof as set forth on such statement shall be final. Tenant's audit or inspection shall be conducted only at Landlord's offices or the offices of Landlord's property manager during business hours reasonably designated by Landlord. Tenant shall pay the cost of such audit or inspection. Tenant may not conduct an inspection or have an audit performed more than once during any fiscal year. If, after such inspection or audit is made, it is finally determined or agreed that that an error was made in the calculation of Tenant's Share of Operating Costs previously charged to Tenant, then, Tenant may credit the difference against the next installment of additional rent on account of Operating Costs due hereunder, except that if such difference is determined after the end of the Term, Landlord shall refund such difference to Tenant within thirty (30) days after such determination to the extent that such difference exceeds any amounts then due from Tenant to Landlord. If, after such inspection or audit is made, it is finally determined or agreed that there was an underpayment by Tenant, then Tenant shall pay to Landlord, as additional rent hereunder, any underpayment of any such costs, as the case may be, within thirty (30) days after receipt of an invoice therefor. Tenant shall maintain the results of any such audit or inspection confidential and shall not be permitted to use any third party to perform such audit or inspection: (A) which is not compensated on a contingency fee basis or in any other manner which is dependent upon the results of such audit or inspection, and (B) which refuses to execute a commercially reasonable confidentiality agreement, whereby it shall agree to maintain the results of such audit or inspection confidential, but subject to commercially reasonable exceptions to such confidentiality. Nothing in the foregoing shall preclude Tenant or its auditor from disclosing any audit or inspection results to third parties, to the extent: (i) required by Legal Requirements, court order, order of governmental authority or pursuant to any requirements or rules of any stock exchange listing, or (ii) in litigation or other dispute resolution proceedings between Landlord and Tenant. The provisions of this Section 5.2(g) shall survive the expiration or earlier termination of this Lease.

5.3 Taxes.

(a) "**Taxes**" shall mean the real estate taxes and other taxes, levies and assessments imposed upon the Building and the Land, and upon any personal property of Landlord used in the operation thereof, or on Landlord's interest therein or such personal property; charges, fees and assessments for transit, housing, police, fire or other services or

purported benefits to the Building and the Land (including without limitation any mandatory community preservation assessments); service or user payments in lieu of taxes; and any and all other taxes, levies, betterments, assessments and charges arising from the ownership, leasing, operation, use or occupancy of the Building and the Land, which are or shall be imposed by federal, state, county, municipal or other governmental authorities. In determining the amount of Taxes for any year, the amount of special assessments to be included shall be limited to the amount of the installment of such special assessment (plus any interest payable thereon) required to be paid during such year had Landlord elected to have such special assessment paid over the maximum period of time permitted by law. Except as provided in the preceding sentence, all references to Taxes "for" a particular year shall be deemed to refer to Taxes levied or assessed with respect to such year without regard to when such taxes are paid or payable. Taxes shall be adjusted to take into account any abatement or refund thereof paid to the Landlord by the taxing authorities in accordance with Sections 5.3(e) and 5.3(f) below. The following are specifically excluded from taxes: penalties or interest or other charges for late payments of taxes, any income, personal property, excess profits, gross receipts, margin, estate, single business, inheritance, succession, transfer, gift, franchise, corporate, capital tax or assessment levied or assessed against Landlord or real property taxes and assessments applicable to any undeveloped portion of the Building being held for future development or any connection, capacity, turn-on, impact or any initial construction of or the initial construction of or to the Building; provided, however, that any of the same and any other tax, excise, fee, levy, charge or assessment, however described, that may in the future be levied or assessed as a substitute for, any tax, levy or assessment which would otherwise constitute Taxes, whether or not now customary or in the contemplation of the parties on the Execution Date of this Lease, shall constitute Taxes, but only to the extent calculated as if the Building and the Land were the only real estate owned by Landlord. The Landlord shall pay, or cause to be paid, before the same become delinquent, all Taxes. From and after substantial completion of any occupiable improvements constructed as part of a Future Development, as defined in Section 2.2, if such improvements are not separately assessed, Landlord shall reasonably allocate Taxes between the Building and such improvements and the land area associated with the same. Taxes shall not include any inheritance, estate, succession, gift, franchise, rental, income or profit tax, capital stock tax, capital levy or excise, or any income taxes arising out of or related to the ownership and operation of the Building and the Land.

(b) "**Tax Period**" shall be any fiscal/tax period in respect of which Taxes are due and payable to the appropriate governmental taxing authority (i.e., as mandated by the governmental taxing authority), any portion of which period occurs during the Term of this Lease.

(c) **Payment of Taxes**. Commencing as of the Term Commencement Date and continuing thereafter throughout the remainder of the Term of the Lease, Tenant shall pay to Landlord, as additional rent, Tenant's Share of Taxes relating to or allocable to the Building and Tenant's Share of Taxes relating to or allocable to the Land. Landlord may make a good faith estimate of the Taxes to be due by Tenant for any Tax Period or part thereof during the Term, and Tenant shall pay to Landlord, on the Term Commencement Date and on the first (1st) day of each calendar month thereafter, an amount equal to Tenant's Share of Taxes for such Tax Period or part thereof divided by the number of months therein. Landlord may estimate and re-estimate Tenant's Share of Taxes and deliver a copy of the estimate or re-estimate to Tenant. Thereafter,

the monthly installments of Tenant's Share of Taxes shall be appropriately adjusted in accordance with the estimations so that, by the end of the Tax Period in question, Tenant shall have paid all of Tenant's Share of Taxes as estimated by Landlord. Any amounts paid based on such an estimate shall be subject to adjustment as herein provided when actual Taxes are available for each Tax Period. If the total of such monthly remittances is greater than Tenant's Share of Taxes actually due for such Tax Period, then, Tenant may credit the difference against the next installment of additional rent on account of Taxes due hereunder, except that if such difference is determined after the end of the Term, Landlord shall refund such difference to Tenant within thirty (30) days after such determination to the extent that such difference exceeds any amounts then due from Tenant to Landlord. If the total of such remittances is less than Tenant's Share of Taxes actually due for such Tax Period, Tenant shall pay the difference to Landlord, as additional rent hereunder, within thirty (30) days of Tenant's receipt of an invoice therefor. Landlord's estimate for the next Tax Period shall be based upon actual Taxes for the prior Tax Period plus a reasonable adjustment based upon estimated increases in Taxes. Landlord shall provide Tenant with a copy of each Tax bill received by Landlord within ten (10) days after Landlord's receipt of such Tax bill; provided however, that in no event shall Landlord's failure to timely deliver any Tax bill de deemed to be a default by Landlord in its obligations hereunder or be considered to be a waiver of Landlord's right to receive payment from Tenant of Tenant's Share of the Taxes imposed pursuant to such Tax bill. The provisions of this Section 5.3(c) shall survive the expiration or earlier termination of this Lease.

(d) **Effect of Abatements**. Appropriate credit against Taxes shall be given for any refund obtained by reason of a reduction in any Taxes by the assessors or the administrative, judicial or other governmental agency responsible therefor after deduction of Landlord's expenditures for reasonable out of pocket and documented legal fees and for other reasonable expenses incurred in obtaining the Tax refund

(e) **Abatement Process**. If Tenant is then leasing space in the Building containing at least fifty (50%) percent of the rentable area of the Building so request in writing by written notice to Landlord at least ten (10) business days prior to the last day for applying for an abatement of Taxes payable by Landlord with respect to any fiscal year, then either: (i) Landlord shall (unless Landlord has previously applied for abatement with respect such fiscal year) apply for, and diligently prosecute, an abatement of Taxes for such fiscal year, or (ii) Landlord shall permit Tenant, at its sole expense, to apply for an abatement of Taxes for such fiscal year. If Landlord elects to allow Tenant to apply for an abatement of Taxes for a fiscal year, then:

(i) Landlord agrees to cooperate with the Tenant, in such manner as Tenant may reasonably request, but at no expense to Landlord, including Landlord's agreement to sign all necessary instruments in connection with such application or appeal, provided Landlord deems the same appropriate in its reasonable discretion.

(ii) Upon the request of Tenant, and if required to preserve the right to challenge such Taxes, Landlord will pay all Taxes under protest or in such other manner as will preserve the right to challenge such Taxes.

(iii) It shall be a condition to the right of Tenant to apply for an abatement with respect to any fiscal year, that Tenant has paid its respective shares of all Taxes due for such fiscal year.

(f) Landlord will reimburse Tenant for its respective share of any refund of Taxes received as a result of any tax contest minus their respective share of expenses incurred by Landlord in order to obtain the refund.

(g) **Part Years**. If the Term Commencement Date or the Expiration Date occurs in the middle of a Tax Period, Tenant shall be liable for only that portion of the Taxes, as the case may be, with respect to such Tax Period within the Term.

5.4 Late Payments.

(a) Any payment of Rent due hereunder not paid within five (5) business days after the same is due shall bear interest for each month or fraction thereof from the due date until paid in full at the rate of ten (10%) percent per annum, or at any applicable lesser maximum legally permissible rate for debts of this nature (the "**Lease Interest Rate**").

(b) Additionally, if Tenant fails to make any payment within five (5) business days after the due date therefor, Landlord may charge Tenant a fee ("**Late Fee**"), which shall constitute liquidated damages, equal to One Thousand and NO/100 Dollars ($1,000.00) for each such late payment. Notwithstanding the foregoing, Landlord agrees that no Late Fee shall be due with respect to any payment due from Tenant during any calendar year, unless an Initial Late Fee Event has previously occurred during such twelve (12) month period. An "**Initial Late Fee Event**" shall mean any failure by Tenant to make a payment when due, which failure is not cured on or before the date five (5) business days after Landlord gives Tenant written notice that such payment is past due. Landlord agrees to waive the Late Fee with respect to the Initial Late Fee Event which occurs in any calendar year.

(c) For each Tenant payment check to Landlord that is returned by a bank for any reason, Tenant shall pay a returned check charge equal to the amount as shall be customarily charged by Landlord's bank at the time.

(d) Money paid by Tenant to Landlord shall be applied to Tenant's account in the following order: first, to any unpaid additional rent, including without limitation late charges, returned check charges, legal fees and/or court costs chargeable to Tenant hereunder; and then to unpaid Base Rent.

(e) The parties agree that the late charge referenced in Section 5.4(b) represents a fair and reasonable estimate of the costs that Landlord will incur by reason of any late payment by Tenant, and the payment of late charges and interest are distinct and separate in that the payment of interest is to compensate Landlord for the use of Landlord's money by Tenant, while the payment of late charges is to compensate Landlord for Landlords processing, administrative and other costs incurred by Landlord as a result of Tenant's delinquent payments. Acceptance of a late charge or interest shall not constitute a waiver of Tenant's default with respect to the overdue amount or prevent Landlord from exercising any of the other rights and remedies available to Landlord under this Lease or at law or in equity now or hereafter in effect.

5.5 No Offset; Independent Covenants; Waiver. Rent shall be paid without notice or demand, and without setoff, counterclaim, defense, abatement, suspension, deferment, reduction or deduction, except as expressly provided herein. **TENANT WAIVES ALL RIGHTS (I) TO ANY ABATEMENT, SUSPENSION, DEFERMENT, REDUCTION OR DEDUCTION OF OR FROM RENT (EXCEPT AS EXPRESSLY SET FORTH IN SECTION 10.5 OF THE LEASE), AND (II) TO QUIT, TERMINATE OR SURRENDER THIS LEASE OR THE PREMISES OR ANY PART THEREOF, EXCEPT AS EXPRESSLY PROVIDED HEREIN. TENANT HEREBY ACKNOWLEDGES AND AGREES THAT THE OBLIGATIONS OF TENANT HEREUNDER SHALL BE SEPARATE AND INDEPENDENT COVENANTS AND AGREEMENTS, THAT RENT SHALL CONTINUE TO BE PAYABLE IN ALL EVENTS AND THAT THE OBLIGATIONS OF TENANT HEREUNDER SHALL CONTINUE UNAFFECTED, UNLESS THE REQUIREMENT TO PAY OR PERFORM THE SAME SHALL HAVE BEEN TERMINATED PURSUANT TO AN EXPRESS PROVISION OF THIS LEASE. LANDLORD AND TENANT EACH ACKNOWLEDGES AND AGREES THAT THE INDEPENDENT NATURE OF THE OBLIGATIONS OF TENANT HEREUNDER REPRESENTS FAIR, REASONABLE, AND ACCEPTED COMMERCIAL PRACTICE WITH RESPECT TO THE TYPE OF PROPERTY SUBJECT TO THIS LEASE, AND THAT THIS AGREEMENT IS THE PRODUCT OF FREE AND INFORMED NEGOTIATION DURING WHICH BOTH LANDLORD AND TENANT WERE REPRESENTED BY COUNSEL SKILLED IN NEGOTIATING AND DRAFTING COMMERCIAL LEASES IN MASSACHUSETTS, AND THAT THE ACKNOWLEDGEMENTS AND AGREEMENTS CONTAINED HEREIN ARE MADE WITH FULL KNOWLEDGE OF THE HOLDING IN WESSON V. LEONE ENTERPRISES, INC., 437 MASS. 708 (2002). SUCH ACKNOWLEDGEMENTS, AGREEMENTS AND WAIVERS BY TENANT ARE A MATERIAL INDUCEMENT TO LANDLORD ENTERING INTO THIS LEASE.**

5.6 Survival. Any obligations under this Section 5 which shall not have been paid at the expiration or earlier termination of the Term shall survive such expiration or earlier termination and shall be paid when and as the amount of same shall be determined and be due.

6. INTENTIONALLY OMITTED.

7. LETTER OF CREDIT/CASH SECURITY DEPOSIT

7.1 Amount. Contemporaneously with the execution of this Lease, Tenant shall deliver either (i) cash in the amount (the "**Security Amount**") specified in the Lease Summary Sheet (the "**Cash Security Deposit**"), which shall be held by Landlord in accordance with Section 7.5 below, or (ii) an irrevocable letter of credit to Landlord which shall be (a) in the amount (the "**Security Amount**") specified in the Lease Summary Sheet, (b) substantially in the form attached hereto as **Exhibit 5**; (c) issued by a bank with a rating of A or better and otherwise reasonably acceptable to Landlord upon which presentment may be made in Boston, Massachusetts; and (d) for a term of one (1) year, subject to extension in accordance with the terms hereof (the "**Letter of Credit**"). The Letter of Credit shall be held by Landlord, without liability for interest, as security for the faithful performance by Tenant of all of the terms, covenants and conditions of this Lease by the Tenant to be kept and performed during the Term.

In no event shall the Letter of Credit be deemed to be a prepayment of Rent nor shall it be considered a measure of liquidated damages. Unless the Letter of Credit is automatically renewing, at least thirty (30) days prior to the maturity date of the Letter of Credit (or any replacement Letter of Credit), Tenant shall deliver to Landlord a replacement Letter of Credit which shall have a maturity date no earlier than the next anniversary of the Commencement Date or one (1) year from its date of delivery to Landlord, whichever is later.

7.2 Application of Proceeds of Letter of Credit. Upon an Event of Default, or if any proceeding shall be instituted by or against Tenant pursuant to any of the provisions of any Act of Congress or State law relating to bankruptcy, reorganizations, arrangements, compositions or other relief from creditors (and, in the case of any proceeding instituted against it, if Tenant shall fail to have such proceedings dismissed within thirty (30) days) or if Tenant is adjudged bankrupt or insolvent as a result of any such proceeding, Landlord at its sole option may draw down all or a part of the Letter of Credit. The balance of any Letter of Credit cash proceeds (after applying the amount drawn to cure Tenant's default and/or to Landlord's damages arising therefrom) shall be held in accordance with Section 7.5 below. Should the entire Letter of Credit, or any portion thereof, be drawn down by Landlord, Tenant shall, upon the written demand of Landlord, deliver a replacement Letter of Credit in the amount drawn, and Tenant's failure to do so within ten (10) days after receipt of such written demand shall constitute an additional Event of Default hereunder. Upon delivery of such replacement Letter of Credit, Landlord shall return to Tenant the balance of any Letter of Credit cash proceeds that are being held in accordance with Section 7.5 below. The application of all or any part of the cash proceeds of the Letter of Credit to any obligation or default of Tenant under this Lease shall not deprive Landlord of any other rights or remedies Landlord may have nor shall such application by Landlord constitute a waiver by Landlord.

7.3 Transfer of Letter of Credit. In the event that Landlord transfers its interest in the Premises, Tenant shall upon notice from Landlord, deliver to Landlord an amendment to the Letter of Credit or a replacement Letter of Credit naming Landlord's successor as the beneficiary thereof If Tenant fails to deliver such amendment or replacement within ten (10) days after written notice from Landlord, Landlord shall have the right to draw down the entire amount of the Letter of Credit and hold the proceeds thereof in accordance with Section 7.5 below. Landlord shall pay the fee charged by the issuer of the Letter of Credit in connection with any such transfer, provided, however, in connection with the first such transfer, Tenant shall pay to Landlord, as additional rent, an amount equal to such fee charged by the issuer, which payment shall be made within thirty (30) days after demand therefor.

7.4 Credit of Issuer of Letter of Credit. In event of a material adverse change in the financial position of any bank or institution which has issued the Letter of Credit or any replacement Letter of Credit hereunder, Landlord reserves the right to require that Tenant change the issuing bank or institution to another bank or institution reasonably approved by Landlord. Tenant shall, within ten (10) days after receipt of written notice from Landlord, which notice shall include the basis for Landlord's reasonable belief that there has been a material adverse change in the financial position of the issuer of the Letter of Credit, replace the then-outstanding letter of credit with a like Letter of Credit from another bank or institution approved by Landlord.

7.5 Cash Proceeds of Letter of Credit. Landlord shall hold the Cash Security Deposit and/or the balance of proceeds remaining after a draw on the Letter of Credit (each hereinafter referred to as the "**Security Deposit**") as security for Tenant's performance of all its Lease obligations. After an Event of Default, Landlord may apply the Security Deposit, or any part thereof, to Landlord's damages without prejudice to any other Landlord remedy. Landlord has no obligation to pay interest on the Security Deposit and may co-mingle the Security Deposit with Landlord's funds. If Landlord conveys its interest under this Lease, the Security Deposit, or any part not applied previously, shall be turned over to the grantee in which case Tenant shall look solely to the grantee for the proper application and return of the Security Deposit.

7.6 Reductions in the Amount of Letter of Credit.

(a) If Tenant satisfies the Base Security Reduction Conditions, as hereinafter defined, then the Security Amount shall be reduced to $800,000 as of the Base Security Reduction Date, as hereinafter defined occurs. If, in addition to satisfying the Base Security Reduction Conditions, Tenant also satisfies the applicable Maximum Security Reduction Conditions, as hereinafter defined, then: (i) the Security Amount shall be reduced to $650,000 as of the third anniversary of the Term Commencement Date ("**Second Reduction**"), and (ii) the Security Amount shall be further reduced to $500,000 as of the fourth anniversary of the Term Commencement Date ("**Third Reduction**"). In no event shall the Security Amount be reduced below $500,000. The Base Security Reduction Date and the third and fourth anniversaries of the Term Commencement Date are referred to collectively herein as "**Reduction Dates**".

(b) **Reduction Conditions**:

(i) The "**Base Security Reduction Conditions**" shall be deemed to be satisfied by Tenant, if all of the following occur: (x) Tenant is in full compliance with Tenant's obligations under the Lease as of Base Security Reduction Date, as hereinafter defined, (y) there has been no monetary or material non-monetary Event of Default by Tenant prior to the Base Security Reduction Date, and (z) Tenant delivers to Landlord evidence, reasonably satisfactory to Landlord, that Tenant has received an aggregate Equity Infusion, as hereinafter defined during the period commencing as of the Execution Date of this Lease and expiring as of the second anniversary of the Term Commencement Date of not less than $50,000,000. The date that Tenant first satisfies all of the Base Security Reduction Conditions is referred to herein as the "**Base Security Reduction Date**".

(ii) The "**Maximum Security Reduction Conditions**" shall be deemed to be satisfied by Tenant for the purposes of achieving the Second Reduction, if all of the following occur: (x) Tenant is in full compliance with Tenant's obligations under the Lease as of the third anniversary of the Term Commencement Date, (y) there has been no monetary or material non-monetary Event of Default by Tenant prior to the third anniversary of the Term Commencement Date, and (z) Tenant delivers to Landlord evidence, reasonably satisfactory to Landlord, that the aggregate amount of Equity Infusion and Net Revenue, as hereinafter defined, received by Tenant during the period commencing as of the Execution Date of this Lease and expiring as of the second anniversary of the Term Commencement Date of not less than $150,000,000.

(iii) The "**Maximum Security Reduction Conditions**" shall be deemed to be satisfied by Tenant for the purposes of achieving the Third Reduction, if all of the following occur: (x) Tenant is in full compliance with Tenant's obligations under the Lease as of the fourth anniversary of the Term Commencement Date, (y) there has been no monetary or material non-monetary Event of Default by Tenant prior to the fourth anniversary of the Term Commencement Date, and (z) the aggregate amount of Equity Infusion and Net Revenue, as hereinafter defined, received by Tenant during the period commencing as of the Execution Date of this Lease and expiring as of the second anniversary of the Term Commencement Date of not less than $150,000,000.

(iv) "**Equity Infusion**" shall be defined as defined as the sale of treasury stock or other equity interests directly in the Tenant entity itself which are owned by the Tenant entity so that, as the Tenant entity itself receives the proceeds of such sale and are considered to be assets of Tenant.

(v) "**Net Revenue**" shall be defined, for any period, as the gross income received by Tenant from the sale of goods and services during such period, net of all costs incurred by Tenant in operating its business during such period.

(c) If Landlord declines to reduce the Security Amount as of a Reduction Date as the result of Tenant's failure to satisfy any applicable Reduction Condition, but Tenant subsequently satisfies all necessary Reduction Conditions after the applicable Reduction Date, then the Security Amount shall, on the date that Tenant satisfies all necessary Reduction Conditions applicable to such Reduction Date, be reduced to the reduced Security Amount applicable to the Reduction Date in question.

(d) Any such reduction in the Security Amount shall be effected within ten (10) business days of Tenant's written request made after the applicable Reduction Date. If Landlord is then holding a Letter(s) of Credit rather than a cash security deposit, the reduction in the Security Amount may be effected by either, at Tenant's election, Tenant's delivering to Landlord: (i) a new Letter of Credit complying with the provisions of this Section 7, in the applicable reduced Security Amount in exchange for the Letter of Credit which is then being held by Landlord; or (ii) an amendment to the Letter of Credit then being held by Landlord, in a form reasonably satisfactory to Landlord, from the bank issuing such Letter of Credit, reflecting the applicable Security Amount.

7.7 Return of Security Deposit or Letter of Credit. Should Tenant comply with all of such terms, covenants and conditions and promptly pay all sums payable by Tenant to Landlord hereunder, the Security Deposit and/or Letter of Credit or the remaining proceeds therefrom, as applicable, shall be returned to Tenant within forty-five (45) days after the end of the Term, less any portion thereof which may have been utilized by Landlord to cure any default or applied to any actual damage suffered by Landlord.

8. SECURITY INTEREST IN TENANT'S PROPERTY.

Intentionally Omitted.

9. UTILITIES, LANDLORD'S SERVICES

9.1 Electricity and Water/Sewer. Landlord shall contract with the utility companies providing electricity and water/sewer service to the Building to obtain such service for the Premises. Landlord represents to Tenant that the electrical capacity available to the Premises will be sufficient to support the equipment described on Exhibit 3-3. Commencing on the Commencement Date, Tenant shall pay all charges for electricity and water/sewer services furnished to the Premises, as Additional Rent, as measured by applicable sub-metering equipment, in accordance with Section 9.2. Landlord shall, as an Operating Cost, maintain and keep in good order, condition and repair such metering equipment.

9.2 Billing Procedures. Tenant shall reimburse Landlord for the entire cost of such electric current and water/sewer consumed in the Premises, as follows:

(a) Commencing as of the Commencement Date and continuing until the procedures set forth in Section 9.2(b) are effected, Tenant shall pay to Landlord at the same time and in the same manner that it pays its monthly payments of Base Rent hereunder, estimated payments (i.e., based upon Landlord's reasonable estimates) on account of Tenant's obligation to reimburse Landlord for electricity and water/sewer services consumed in the Premises.

(b) Periodically after the Commencement Date (but at last once every 12 months), Landlord shall determine the actual cost of electricity and water/sewer services consumed by Tenant in the Premises (i.e. by reading the applicable sub-meter and by applying the applicable rate which shall not exceed the retail rate which would have been payable by Tenant had Tenant obtained such services directly from the utility company providing electric current and water/sewer to Landlord. If the total of Tenant's estimated monthly payments on account of such period is less than the actual cost of electricity and/or water/sewer services consumed in the Premises during such period, Tenant shall pay the difference to Landlord when billed therefor. If the total of Tenant's estimated monthly payments on account of such period is greater than the actual cost of electricity and/or water/sewer services consumed in the Premises during such period, Tenant may credit the difference against its next installment of rental or other charges due hereunder.

(c) After each adjustment, as set forth in Section 9.2(b) above, the amount of estimated monthly payments on account of Tenant's obligation to reimburse Landlord for electricity and/or water/sewer services in the Premises (as applicable) shall be adjusted based upon the actual cost of electricity and/or water/sewer services consumed during the immediately preceding period.

9.3 Gas. Tenant shall pay all charges for gas furnished to the Premises and/or any equipment exclusively serving the Premises as additional rent, based on applicable metering equipment. Landlord shall, as an Operating Cost, maintain and keep in good order, condition and repair the metering equipment used to measure gas furnished to the Premises and any equipment exclusively serving the same. Tenant shall pay the full amount of any charges attributable to such meter on or before the due date therefor directly to the supplier thereof.

9.4 Other Utilities. Subject to Landlord's reasonable rules and regulations governing the same, Tenant shall obtain and pay, as and when due, for all other utilities and services consumed in and/or furnished to the Premises, together with all taxes, penalties, surcharges and maintenance charges pertaining thereto.

9.5 Interruption or Curtailment of Utilities. When necessary by reason of accident or emergency, or for repairs, alterations, replacements or improvements which in the reasonable judgment of Landlord are desirable or necessary to be made, Landlord reserves the right, upon as much prior notice to Tenant as is practicable under the circumstances and no less than twenty-four (24) hours' notice except in the event of an emergency, to interrupt, curtail, or stop (i) the furnishing of hot and/or cold water, and (ii) the operation of the plumbing and electric systems. Landlord shall exercise reasonable diligence to eliminate the cause of any such interruption, curtailment, stoppage or suspension, but, except as set forth in Section 10.5 below, there shall be no diminution or abatement of Rent or other compensation due from Landlord to Tenant hereunder, nor shall this Lease be affected or any of Tenant's obligations hereunder reduced, and Landlord shall have no responsibility or liability for any such interruption, curtailment, stoppage, or suspension of services or systems.

9.6 Utility Connections. Landlord shall make electricity, water and natural gas connections available to the Premises prior to the Commencement Date and thereafter throughout the Term.

9.7 Trash. Landlord shall make available to Tenant an area on the Property in which Tenant shall locate a trash receptacle ("**Tenant's Trash Receptacle**") approved by Landlord (which approval shall not be unreasonably withheld, conditioned, or delayed). Throughout the Term, Tenant shall, at its sole cost and expense: (i) keep any garbage, trash, rubbish and refuse (collectively, "**Trash**") in vermin-proof containers within the interior of the Premises until removed; and (ii) deposit such Trash on a daily basis, in receptacles (e.g., dumpsters or compactors) designated by Landlord. Landlord shall furnish (or authorize others to furnish) a service for the removal of Trash from receptacles designated by Landlord, the costs of which shall be allocated among the tenants using such receptacle. In no event shall Tenant place any Hazardous Materials in such designated receptacles.

9.8 Landlord's Services. Subject to reimbursement pursuant to Section 5.2 above, Landlord shall provide the services described in **Exhibit 6** attached hereto and made a part hereof.

10. MAINTENANCE AND REPAIRS

10.1 Maintenance and Repairs by Tenant. Tenant shall keep neat and clean and free of insects, rodents, vermin and other pests and in good repair, order and condition the Premises, including without limitation the entire interior of the Premises, all electronic, phone and data cabling and related equipment that is installed by or for the exclusive benefit of the Tenant (whether located in the Premises or other portions of the Building), all fixtures, equipment and lighting therein, electrical equipment wiring, doors, non structural walls, windows and floor coverings, reasonable wear and tear and damage by Casualty and Taking, and damage caused by Landlord, or Landlord's agents, employees, or contractors excepted. Tenant shall be solely responsible, at Tenant's sole cost and expense, for the proper maintenance of all building

systems, life-safety, sanitary, heating and air conditioning (subject, however, to Section 10.1A below), plumbing (other than water and sewer service), security or other systems and of all equipment and appliances located within and/or exclusively serving the Premises. Commencing as of the Commencement Date and continuing thereafter throughout the Term of the Lease, Tenant agrees to provide regular maintenance by contract with a reputable qualified service contractor for the heating and air conditioning equipment servicing the Premises ("**Premises HVAC Equipment**"). Such maintenance contract and contractor shall be subject to Landlord's reasonable approval (Landlord hereby agreeing that, as of the Execution Date, Landlord has approved Environmental Systems Incorporated to perform maintenance services for Tenant with respect to the Premises HVAC Equipment). Tenant, at Landlord's request, shall at reasonable intervals provide Landlord with copies of such contracts and maintenance and repair records and/or reports.

10.1A Maintenance of Premises HVAC Equipment. The parties acknowledge that, as of the Commencement Date, the Premises HVAC Equipment will consist of three (3) pieces of mechanical equipment: a McQuay unit, an Aaon unit, and a Carrier unit (each an "**HVAC Unit**"). Notwithstanding the provisions of Section 10.1, the following shall set forth the obligations of the parties with respect to the maintenance, repair, and replacement of the Premises HVAC Equipment:

(i) First Year of Term. During the one year period commencing as of the Commencement Date, Landlord shall be responsible for all repairs and replacements (but not ordinary maintenance of the Premises HVAC Equipment, which shall be the responsibility of Tenant in accordance with Section 10.1) which are required in order to keep the Premises HVAC Equipment in good working order, except to the extent that the same are required by reason of the negligence, willful misconduct or fault of Tenant or any Tenant Party, or as the result of fire, other casualty or taking. No costs incurred by Landlord pursuant to this Section 10.1A(i) shall be included in Operating Expenses.

(ii) Replacement of Major Components of Premises HVAC Equipment. If any major component of the Premises HVAC Equipment (including, without limitation, compressors, fan motors, variable frequency drives, and controllers) must be replaced, for any reason other than as the result of fire, other casualty or taking, then Landlord shall cause such replacement to be made. If, subject to Section 14.5, the need for such replacement arises from the negligence, willful misconduct or fault of Tenant or any Tenant Party, then Tenant shall be responsible for the entire cost of such replacement and shall reimburse Landlord for such cost within thirty (30) days of demand. Otherwise, the costs ("**Replacement Cost for Major HVAC Component**") so incurred by Landlord shall be considered to be a Permitted Capital Expenditure, within the meaning of Section 5.2(a) and be included in Operating Expenses, on an amortized basis, as more particularly set forth in Section 5.2(a).

(iii) Replacement of an HVAC Unit. If it is not possible to maintain any of the HVAC Units in good operating condition without replacing the entire HVAC Unit, then Landlord shall cause such replacement to be made. If, subject to Section 14.5, the need for such replacement arises from the negligence, willful misconduct or fault of Tenant or any Tenant Party, then Tenant shall be responsible for the entire cost of such replacement and shall reimburse Landlord for such cost within thirty (30) days of demand. Otherwise, Landlord shall be responsible for the entirety of such cost and such cost shall not be included in Operating Expenses.

(iv) Disputes with respect to HVAC Repair or Replacement. Any dispute between the parties with respect to the need for repair or replacement of any component of the Premises HVAC Equipment or the need for replacement of an entire HVAC Unit may, upon the written election of either party, be submitted to arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association, Boston, Massachusetts office.

10.2 Maintenance and Repairs by Landlord. Except as otherwise provided in Section 15, and subject to Tenant's obligations in Section 10.1 above, Landlord shall maintain, repair and replace, and keep in reasonable condition the Building foundation, the roof, Building structure, structural floor slabs and columns in good repair, order and condition. In addition, Landlord shall operate and maintain the Common Areas in reasonable condition, and shall cause all paved portions of the Common Areas to be reasonably free from ice and snow. When Landlord performs maintenance, repair and replacement work, Landlord shall use reasonable efforts to minimize any interference with Tenant's use and occupancy of the Premises, but this shall not require that such work be performed after Business Hours, other than work that, by its nature, will disrupt normal business activities, which disruptive work will be performed after Business Hours (except in an emergency). Except in the event of emergency, Landlord will not enter the Premises under this Section 10.2 without giving Tenant reasonable advance notice. Landlord shall cause the Common Areas to comply with all the applicable federal, state and municipal laws, ordinances and regulations including, without limitation, Title III of the Americans with Disabilities Act of 1990 and the regulations and standards promulgated thereunder throughout the Term and any extension thereof

10.3 Accidents to Sanitary and Other Systems. Tenant shall give to Landlord prompt notice of any fire or accident in the Premises or in the Building and of any damage to, or defective condition in, any part or appurtenance of the Building including, without limitation, sanitary, electrical, ventilation, heating and air conditioning or other systems located in, or passing through, the Premises. Except as otherwise provided in Section 15, and subject to Tenant's obligations in Section 10.1 above, such damage or defective condition shall be remedied by Landlord with reasonable diligence, but, subject to Section 14.5 below, if such damage or defective condition was caused by any of the Tenant Parties, the cost to remedy the same shall be paid by Tenant.

10.4 Floor Load–Heavy Equipment. Tenant shall not place a load upon any floor of the, Premises exceeding the floor load which such floor was designed to carry and which is allowed by Legal Requirements. Landlord reserves the right to prescribe the weight and position of all safes, heavy machinery, heavy equipment, freight, bulky matter or fixtures (collectively, "**Heavy Equipment"**), which shall be placed so as to distribute the weight. Heavy Equipment shall be placed and maintained by Tenant at Tenant's expense in settings sufficient in Landlord's reasonable judgment to absorb and prevent vibration, noise and annoyance. Tenant shall not move any Heavy Equipment into or out of the Building without giving Landlord prior written notice thereof and observing all of Landlord's Rules and Regulations with respect to the same. If such Heavy Equipment requires special handling, Tenant agrees to employ only persons holding a Master Rigger's License to do said work, and that all work in connection therewith shall comply with Legal Requirements. Any such moving shall be at the sole risk and hazard of Tenant and Tenant will defend, indemnify and save Landlord and Landlord's agents (including without limitation its property manager), contractors and employees (collectively with Landlord,

the "**Landlord Parties**") harmless from and against any and all claims, damages, losses, penalties, costs, expenses and fees (including without limitation reasonable legal fees) (collectively, "**Claims**") resulting directly or indirectly from such moving. Proper placement of all Heavy Equipment in the Premises shall be Tenant's responsibility.

10.5. **Service Interruptions.**

(a) Abatement of Rent. In the event that: (i) there shall be an interruption, curtailment or suspension of any service or failure to perform any obligation required to be provided or performed by Landlord pursuant to Sections 9 and/or 10 (and no reasonably equivalent alternative service or supply is provided by Landlord) that shall materially interfere with Tenant's use and enjoyment of the Premises, or any portion thereof (any such event, a "**Service Interruption**"), and (ii) such Service Interruption shall continue for five (5) consecutive business days following receipt by Landlord of written notice (the "**Service Interruption Notice**") from Tenant describing such Service Interruption ("**Abatement Service Interruption Cure Period**"), and (iii) such Service Interruption shall not have been caused by an act or omission of Tenant or Tenant's agents, employees, contractors or invitees (an event that satisfies the foregoing conditions (i)-(iii) being referred to hereinafter as a "**Material Service Interruption**") then, Tenant, subject to the next following sentence, shall be entitled to an equitable abatement of Base Rent, Operating Costs and Taxes based on the nature and duration of the Material Service Interruption and the area of the Premises affected, for any and all days following the Material Service Interruption Cure Period that both (x) the Material Service Interruption is continuing and (y) Tenant does not use such affected areas of the Premises for a bona fide business purpose. The Abatement Service Interruption Cure Period shall be extended by reason of any delays in Landlord's ability to cure the Service Interruption in question caused by Landlord's Force Majeure, provided however, that in no event shall the Abatement Service Interruption Cure Period with respect to any Service Interruption be longer than twelve (12) consecutive business days after Landlord receives the applicable Service Interruption Notice.

(b) Tenant's Termination Right. In the event that: (i) a Service Interruption occurs, and (ii) such Service Interruption continues for a period of ninety (90) consecutive days after Landlord receives a Service Interruption Notice with respect to such Service Interruption ("**Termination Service Interruption Cure Period**"), and (iii) such Service Interruption shall not have been caused by an act or omission of Tenant or Tenant's agents, employees, contractors or invitees, and (iv) for so long as Tenant ceases to use the affected portion of the Premises during such Service Interruption, then Tenant shall have the right to terminate this Lease by giving a written termination notice to Landlord after the expiration of the Termination Service Interruption Cure Period. If such Service Interruption is cured within ten (10) days ("**Post-Termination Notice Cure Period**') after Landlord receives such termination notice, then Tenant shall have no right to terminate this Lease based upon such Service Interruption and Tenant's termination notice shall be of no force or effect. The Termination Service Interruption Cure Period and the Post-Termination Notice Cure Period shall each be extended by reason of any delays in Landlord's ability to cure the Service Interruption in question caused by Landlord's Force Majeure, provided however, that in no event shall the aggregate extension of the Termination Service Interruption Cure Period and the Post-Termination Notice Cure Period by reason of Landlord's Force Majeure exceed sixty (60) days.

(c) The provisions of this Section 10.5 shall not apply in the event of a Service Interruption caused by Casualty or Taking (see Section 15 hereof).

(d) The provisions of this Section 10.5 set forth Tenant's sole rights and remedies, both in law and in equity, in the event of any Service Interruption

11. ALTERATIONS AND IMPROVEMENTS BY TENANT

11.1 Landlord's Consent Required. Tenant shall not make any alterations, decorations, installations, removals, additions or improvements (collectively, "**Alterations**") in or to the Premises without Landlord's prior written approval of the contractor(s), written plans and specifications ("**Tenant's Plans**") and a time schedule therefor. Such approval shall not be unreasonably withheld, conditioned or delayed, except that Landlord may withhold its consent on the basis of Landlord's bona fide business judgment with respect to: (i) aesthetic matters relating to Alterations which are visible from the exterior of the Building, and (ii) Alterations affecting the exterior of the Building. Landlord reserves the right to require that Tenant use Landlord's preferred vendor(s) for any Alterations that involve roof penetrations, alarm tie-ins, sprinklers, fire alarm and other life safety equipment. Tenant shall not make any amendments or additions to plans and specifications approved by Landlord without Landlord's prior written consent. Tenant shall be responsible for all elements of the design of Tenant's plans (including, without limitation, compliance with Legal Requirements, functionality of design, the structural integrity of the design, the configuration of the Premises and the placement of Tenant's furniture, appliances and equipment), and Landlord's approval of Tenant's plans shall in no event relieve Tenant of the responsibility for such design. In seeking Landlord's approval, Tenant shall provide Landlord, at least ten (10) business days in advance of any proposed construction, with plans, specifications, bid proposals, certified stamped engineering drawings and calculations by Tenant's engineer of record or architect of record, (including connections to the Building's structural system, modifications to the Building's envelope, non-structural penetrations in slabs or walls, and modifications or tie-ins to life safety systems), work contracts, requests for laydown areas and such other information concerning the nature and cost of the alterations as Landlord may reasonably request. Landlord shall, within five (5) business days after Landlord receives a written request ("**Tenant's Plan Approval Request**") from Tenant requesting Landlord's approval of Tenant's Plans, whether Landlord approves or objects to Tenant's Plans and shall specify in reasonable detail the manner, if any, in which Tenant's Plans are unacceptable. Tenant's Plan Approval Request shall include Tenant's Plans. If Landlord fails to respond to Tenant's Plan Approval Request in writing, as required above, within such five (5) business day period, then Landlord shall be deemed to have approved Tenant's Plan Approval Request, but only if Tenant's Plan Approval Request includes a statement, in **14 POINT BOLD TYPE, REFERRING TO THIS SECTION 11.1 AND ADVISING LANDLORD THAT, IF LANDLORD FAILS RESPOND TO TENANT'S PLAN APPROVAL REQUEST WITHIN FIVE (5) BUSINESS DAYS AFTER LANDLORD'S RECEIPT OF TENANT'S PLAN APPROVAL REQUEST, THEN TENANT'S PLAN APPROVAL REQUEST SHALL BE DEEMED TO BE APPROVED**. Landlord shall have no liability or responsibility for any claim, injury or damage alleged to have been caused by the particular materials (whether building standard or non-building standard), appliances or equipment selected by Tenant in

connection with any work performed by or on behalf of Tenant. Except as otherwise expressly set forth herein, all Alterations shall be done at Tenant's sole cost and expense and at such times and in such manner as Landlord may from time to time reasonably designate. If Tenant shall make any Alterations (other than the initial Tenant Improvement Work which shall be performed by Landlord), then Landlord may elect by written notice to Tenant given at the time of such approval to require Tenant, at or before the expiration or sooner termination of the Term of this Lease, to restore the Premises to substantially the same condition as existed immediately prior to the Alterations. Tenant shall provide Landlord with reproducible record drawings (in CAD format) of all Alterations within sixty (60) days after completion thereof.

Notwithstanding the terms of this Section, Tenant shall have the right, without obtaining the prior consent of Landlord but upon notice to Landlord given ten (10) days prior to the commencement of any work (which notice shall specify the nature of the work in reasonable detail), to make alterations, additions or improvements to the Premises where:

(i) the same are within the interior of the Premises within the Building, and do not affect the exterior of the Premises and the Building (including no signs on windows); and

(ii) the same do not affect the roof, any structural element of the Building, the mechanical, electrical, plumbing, heating, ventilating, air-conditioning and fire protection systems of the Building.

11.2 After-Hours. Landlord and Tenant recognize that to the extent Tenant elects to perform some or all of the Alterations during times other than normal construction hours (i.e., Monday-Friday, 7:00 a.m. to 3:00 p.m., excluding holidays), Landlord may need to make arrangements to have supervisory personnel on site. Accordingly, Landlord and Tenant agree as follows: Tenant shall give Landlord at least two (2) business days' prior written notice of any time outside of normal construction hours when Tenant intends to perform any Alterations (the "**After-Hours Work**"). Tenant shall reimburse Landlord, within ten (10) days after written demand therefor, for the cost of Landlord's supervisory personnel overseeing the After-Hours Work. In addition, if construction during normal construction hours unreasonably disturbs other tenants of the Building, in Landlord's reasonable discretion, Landlord may require Tenant to stop the performance of Alterations during normal construction hours and to perform the same after hours, subject to the foregoing requirement to pay for the cost of Landlord's supervisory personnel.

11.3 Harmonious Relations. Tenant agrees that it will not, either directly or indirectly, use any contractors if their use will create any difficulty, whether in the nature of a . labor dispute or otherwise, with other contractors and/or labor engaged by Tenant or Landlord or others in the construction, maintenance and/or operation, of the Building, the Property or any part thereof. In the event of any such difficulty, upon Landlord's written request, Tenant shall cause all contractors, mechanics or laborers causing such difficulty to leave the Property immediately.

11.4 Liens. No Alterations shall be undertaken by Tenant until (i) Tenant has made provision for written waiver of liens from all contractors providing services in excess of $25,000 for such Alteration, and (ii) with respect to any Alterations made by Tenant, the cost of which

exceed $250,000, Tenant has procured appropriate surety payment and performance bonds ("**Bonds**") which shall name Landlord as an additional obligee and has filed lien bond(s) (in jurisdictions where available) on behalf of such contractors. Any mechanic's lien filed against the Premises or the Building for work claimed to have been done for, or materials claimed to have been furnished to, Tenant shall be discharged by Tenant within ten (10) business days thereafter, at Tenant's expense by filing the bond required by law or otherwise.

11.5 General Requirements. Unless Landlord and Tenant otherwise agree in writing, Tenant shall (a) procure or cause others to procure on its behalf all necessary permits before undertaking any Alterations in the Premises (and provide copies thereof to Landlord); (b) perform all of such Alterations in a good and workmanlike manner, employing materials of good quality and in compliance with Landlord's construction rules and regulations, all insurance requirements of this Lease, and Legal Requirements; and (c) defend, indemnify and hold the Landlord Parties harmless from and against any and all Claims occasioned by or growing out of such Alterations, except to the extent the same results from the negligence or willful misconduct of Landlord or Landlord's managing agent.

12. SIGNAGE

12.1 Restrictions. Tenant shall have the right, at Tenant's expense, to install Building standard signage identifying Tenant's business at the entrance to the Premises. In addition, Tenant's name shall be listed in the Building directory. The cost of the initial installation of all such signage shall be at Landlord's cost, and any changes shall be at Tenant's cost. Subject to the foregoing, and subject to Section 12.2 below, Tenant shall not place or suffer to be placed or maintained on the exterior of the Premises, or any part of the interior visible from the exterior thereof, any sign, banner, advertising matter or any other thing of any kind (including, without limitation, any hand-lettered advertising), and shall not place or maintain any decoration, letter or advertising matter on the glass of any window or door of the Premises without first obtaining Landlord's written approval. No signs may be put on or in any window or elsewhere if visible from the exterior of the Building.

12.2 Façade Signage and Monument Signage.

(a) Exterior Signage. So long as (w) there is no Event of Default of Tenant, (x) Tenant has not assigned the Lease to an entity other than an Affiliated Entity or a Successor, (y) Tenant is leasing at least 23,000 rentable square feet in the Building, and (z) the Lease is in full force and effect (the "**Façade Signage Conditions**"), then, subject to the provisions of this Section 12.2, Tenant shall have the right to, at Tenant's cost and expense, to install a sign ("**Tenant's Façade Sign**") on the south facing wall of the Building above Tenant's exclusive entrance on such south-facing wall in the location shown on Exhibit 13. In addition, so long as (x) there is no Event of Default of Tenant, (y) Tenant is leasing at least 12,000 rentable square feet in the Building, and (z) the Lease is in full force and effect (the "**Monument Signage Conditions**"), then, subject to the provisions of this Section 12.2, Tenant shall have the right to, at Tenant's cost and expense, to install a sign ("**Tenant's Monument Sign**") on the monument to be constructed by Landlord on the Property. Such monument shall be in the location shown on Exhibit 13, and shall be a common monument (i.e. other tenant(s) in the Building may have identification signage installed on such monument. Tenant's Façade Sign and Tenant's

Monument Sign are referred to collectively herein as "**Tenant's Exterior Signage**", and the Façade Signage Conditions and Monument Signage Conditions, as applicable, are hereinafter referred to herein as "**Exterior Signage Conditions**". Landlord covenants and agrees that, so long as the Facade Signage Conditions are satisfied, then there shall be no other signage permitted on such south facing wall.

(b) Exterior Signage Conditions and Obligations. Tenant's right to maintain Tenant's Exterior Signage are subject to the following conditions and obligations: (a) Tenant's Exterior Signage shall be subject to the prior written approval of Landlord as to location, size, materials, manner of attachment and appearance of Tenant's Exterior Signage, and the materials, design, lighting and method of installation of Tenant's Exterior Signage, and any requested changes thereto, shall be subject to Landlord's prior written approval, which approval shall not be unreasonably withheld, conditioned or delayed, (b) Tenant's Exterior Signage shall comply with all Legal Requirements (and Tenant shall have obtained any necessary permits prior to installing Tenant's Exterior Signage), (c) Tenant shall have obtained all governmental permits and approvals required in connection therewith, (d) the maintenance and removal of such Tenant's Exterior Signage (including, without limitation, the repair and cleaning of the existing monument façade and exterior of the Building, as applicable, upon removal of Tenant's Exterior Signage) shall be performed at Tenant's sole cost and expense in accordance with the terms and conditions governing alterations pursuant to Article 11 hereof, (e) Tenant's Exterior Signage shall be subject to Landlord's reasonable regulations, and (f) Tenant shall have the right, from time to time throughout the Term of this Lease, to replace Tenant's Exterior Signage (if any) with signage which is equivalent to the signage being replaced, subject to all of the terms and conditions of this Section 12.2.

(c) Removal of Tenant's Exterior Signage. Notwithstanding the foregoing provisions of this Section 12.2 to the contrary: (i) within thirty (30) days after the date on which there occurs, and remains uncured, a failure of one or more of the applicable Tenant's Exterior Signage Conditions, or (ii) immediately upon the expiration or earlier termination of the Term of the Lease, Tenant shall, at Tenant's cost and expense, remove the applicable Tenant's Exterior Signage and restore all damage to the Building caused by the installation and/or removal of Tenant's Exterior Signage, which removal and restoration shall be performed in accordance with the terms and conditions governing alterations pursuant to Article 11 hereof. The right to the Tenant's Exterior Signage granted pursuant to this Section 12.2 is personal to Tenant, and may not be exercised by any occupant, subtenant, or other assignee of Tenant, other than an Affiliated Entity or Successor (the parties hereby agreeing that Tenant shall be responsible for the cost of any change in Tenant's Exterior Signage).

13. ASSIGNMENT, MORTGAGING AND SUBLETTING

13.1 Landlord's Consent Required. Tenant shall not mortgage or encumber this Lease in whole or in part whether at one time or at intervals, by operation of law or otherwise. Except as expressly otherwise set forth herein, Tenant shall not, without Landlord's prior written consent, assign, sublet, license or transfer this Lease or the Premises in whole or in part whether by changes in the ownership or control of Tenant, or any direct or indirect owner of Tenant, whether at one time or at intervals, by sale or transfer of stock, partnership or beneficial interests, operation of law or otherwise, or permit the occupancy of all or any portion of the Premises by

any person or entity other than Tenant's employees (each of the foregoing, a "**Transfer**"). Any purported Transfer made without Landlord's consent, if required hereunder, shall be void and confer no rights upon any third person, provided that if there is a Transfer, Landlord may collect rent from the transferee without waiving the prohibition against Transfers, accepting the transferee, or releasing Tenant from full performance under this Lease. No Transfer shall relieve Tenant of its primary obligation as party Tenant hereunder, nor shall it reduce or increase Landlord's obligations under this Lease.

13.2 Landlord's Recapture Right.

Subject to Section 13.6 below, Tenant shall, prior to offering or advertising the Premises or any portion thereof for a Transfer, give a written notice (the "**Recapture Offer**") to Landlord which: (i) states that Tenant desires to make a Transfer, (ii) identifies the affected portion of the Premises (the "**Recapture Premises**"), (iii) identifies the period of time (the "**Recapture Period**") during which Tenant proposes to sublet the Recapture Premises, or indicates that Tenant proposes to assign its interest in this Lease, and (iv) offers to Landlord to terminate this Lease with respect to the Recapture Premises (in the case of a proposed assignment of Tenant's interest in this Lease or a subletting for the remainder of the term of this Lease) or to suspend the Term for the Recapture Period (i.e. the Term with respect to the Recapture Premises shall be terminated during the Recapture Period and Tenant's rental obligations shall be proportionately reduced). Landlord shall have the right, to accept such Recapture Offer, by giving written notice ("**Recapture Notice**") to Tenant not later than the date thirty (30) days after Landlord receives such Recapture Offer. If Landlord timely gives a Recapture Notice, then the Term of the Lease with respect to the Recapture Premises shall terminate as of the Recapture Termination Date as if the Recapture Termination Date were the Expiration Date of the Term of the Lease, or the Term of the Lease with respect to the Recapture Premises shall be suspended for the Recapture Term, as the case may be. Notwithstanding anything herein to the contrary, Tenant shall have the right, by written notice ("**Rescission Notice**') to Landlord on or before the date ten (10) days after Landlord gives a Recapture Notice to Tenant accepting such Recapture Offer, to rescind such Recapture Offer, provided however, that if Tenant so rescinds a Recapture Offer, then Tenant shall have no right to give Landlord a subsequent Recapture Offer (i.e., and no right to enter into any sublease or assignment other than pursuant to Section 13.7 below) during the six (6) month period immediately following the date that Tenant such Rescission Notice to Landlord.

13.3 Standard of Consent to Transfer. If Landlord does not timely give written notice to Tenant accepting a Recapture Offer or declines to accept the same, then Landlord agrees that, subject to the provisions of this Section 13, Landlord shall not unreasonably withhold, condition or delay its consent to a Transfer on the terms contained in the Recapture Notice to an entity which will use the Premises for the Permitted Uses and, in Landlord's reasonable opinion: (a) has a business reputation compatible with the operation of a first-class combination laboratory, research, development and office building; and (b) the intended use of such entity does not violate any restrictive use provisions then in effect with respect to space in the Building (Landlord hereby agreeing that Landlord shall, within ten (10) days of Landlord's receipt of a written request therefore from Tenant, advise Tenant of any such restrictive use provisions then in effect); and (c) with respect to any proposed assignment of the Lease only (as distinguished from any other Transfer, including without limitation a sublease), has a tangible net worth and other financial indicators sufficient to meet the assignee's obligations under the

Lease, taking into account the fact that Tenant remains fully liable for Tenant's obligations under the Lease. If Landlord consents to a Transfer pursuant to the provisions of this Section 13, then the Landlord, Tenant and the subtenant or assignee in question, as the case may be, shall enter into a Consent in the form attached as Exhibit 7-1 or Exhibit 7-2, as applicable.

13.4 Listing Confers no Rights. The listing of any name other than that of Tenant, whether on the doors of the Premises or on the Building directory, or otherwise, shall not operate to vest in any such other person, firm or corporation any right or interest in this Lease or in the Premises or be deemed to effect or evidence any consent of Landlord, it being expressly understood that any such listing is a privilege extended by Landlord revocable at will by written notice to Tenant.

13.5 Landlord's Share of Transfer Profit. Tenant shall, within ten (10) days of receipt thereof, pay to Landlord fifty percent (50%) of any rent, sum or other consideration to be paid or given in connection with any Transfer, either initially or over time, after deducting reasonable actual out-of-pocket expenses incurred by Tenant in connection with such Transfer, including, without limitation, legal, brokerage, design, construction, and incentives paid for by Tenant in connection with such Transfer, in excess of Rent hereunder as if such amount were originally called for by the terms of this Lease as additional rent.

13.6 Prohibited Transfers. Notwithstanding any contrary provision of this Lease, Tenant shall have no right to make a Transfer unless on both (i) the date on which Tenant notifies Landlord of its intention to enter into a Transfer and (ii) the date on which such Transfer is to take effect, Tenant is not in default of any of its obligations under this Lease beyond the applicable cure period. Notwithstanding anything to the contrary contained herein, Tenant agrees that in no event shall Tenant make a Transfer to (a) any government agency; (b) any tenant, subtenant or occupant of other space in the Building; or (c) any entity with whom Landlord shall have engaged in material negotiations for space in the Property in the three (3) months immediately preceding such proposed Transfer, as evidenced by Landlord's written correspondence with such entity.

13.7 Exceptions to Requirement for Consent. Notwithstanding anything to the contrary herein contained, Tenant shall have the right, without obtaining Landlords consent and without giving Landlord a Recapture Notice, to make a Transfer to (a) an Affiliated Entity (hereinafter defined) so long as such entity remains in such relationship to Tenant, and (b) a Successor, provided that prior to or simultaneously with any such Transfer, such Affiliated Entity or Successor, as the case may be, and Tenant execute and deliver to Landlord a mutually acceptable assignment and assumption agreement, whereby such Affiliated Entity or Successor, as the case may be, shall agree to be independently bound by and upon all the covenants, agreements, terms, provisions and conditions set forth in the Lease on the part of Tenant to be performed, and whereby such Affiliated Entity or Successor, as the case may be, shall expressly agree that the provisions of this Section 13 shall, notwithstanding such Transfer, continue to be binding upon it with respect to all future Transfers, and a Consent in the form attached hereto as Exhibit 7-1. For the purposes hereof, an "**Affiliated Entity**" shall be defined as any entity which is controlled by, is under common control with, or which controls Tenant, so long as such entity remains in such relationship with Tenant. For the purposes hereof, a "**Successor**" shall be defined as any entity into or with which Tenant is merged or with which Tenant is consolidated

or which acquires all or substantially all of Tenant's stock or assets, provided that the surviving entity shall have a net worth equal to or greater than the net worth of Tenant on the day prior to such transaction.

14. INSURANCE; INDEMNIFICATION; EXCULPATION

14.1 Tenant's Insurance.

(a) Tenant shall procure, pay for and keep in force throughout the Term (and for so long thereafter as Tenant remains in occupancy of the Premises) commercial general liability insurance insuring Tenant on an occurrence basis against all claims and demands for personal injury liability (including, without limitation, bodily injury, sickness, disease, and death) or damage to property which may be claimed to have occurred from and after the time any of the Tenant Parties shall first enter the Premises, of not less than One Million Dollars ($1,000,000) per occurrence and Two Million Dollars ($2,000,000) in the aggregate annually, and from time to time thereafter shall be not less than such higher amounts, if procurable, as may be reasonably required by Landlord. Tenant shall also carry umbrella liability coverage in an amount of no less than Five Million Dollars ($5,000,000). Such policy shall also include contractual liability coverage covering Tenant's liability assumed under this Lease, including without limitation Tenant's indemnification obligations. Such insurance policy(ies) shall name Landlord, Landlord's managing agent and persons claiming by, through or under them, if any, as additional insureds.

(b) Tenant shall take out and maintain throughout the Term a policy of fire, vandalism, malicious mischief, extended coverage and so-called "all risk" coverage insurance in an amount equal to one hundred percent (100%) of the replacement cost insuring (i) all items or components of Alterations, other than the initial Tenant Improvement Work to be performed by Landlord (collectively, the "**Tenant-Insured Improvements**"), and (ii) all of Tenant's furniture, equipment, fixtures and property of every kind, nature and description related or arising out of Tenant's leasehold estate hereunder, which may be in or upon the Premises or the Building, including, all of Tenant's animals (collectively, "**Tenant's Property**"). The insurance required to be maintained by Tenant pursuant to this Section 14.1(b) (referred to herein as "**Tenant Property Insurance**) shall insure the interests of both Landlord and Tenant as their respective interests may appear from time to time.

(c) Tenant shall take out and maintain a policy of business interruption insurance throughout the Term sufficient to cover at least twelve (12) months of Rent due hereunder and Tenant's business losses during such 12-month period.

(d) During periods when Tenant's Work and/or any Alterations are being performed, Tenant shall maintain, or cause to be maintained, so-called all risk or special cause of loss property insurance or its equivalent and/or builders risk insurance on 100% replacement cost coverage basis, including hard and soft costs coverages. Such insurance shall protect and insure Landlord, Landlord's agents, Tenant and Tenant's contractors, as their interests may appear, against loss or damage by fire, water damage, vandalism and malicious mischief, and such other risks as are customarily covered by so-called all risk or special cause of loss property / builders risk coverage or its equivalent.

(e) Tenant shall procure and maintain at its sole expense such additional insurance as may be necessary to comply with any Legal Requirements.

(f) Tenant shall cause all contractors and subcontractors to maintain during the performance of any Alterations the insurance described in Exhibit 8 attached hereto.

(g) The insurance required pursuant to Sections 14.1(a), (b), (c), (d) and (e) (collectively, "**Tenant's Insurance Policies**") shall be effected with insurers approved by Landlord, with a rating of not less than "A-XI" in the current *Best's Insurance Reports*, and authorized to do business in the Commonwealth of Massachusetts under valid and enforceable policies. Tenant's Insurance Policies shall each provide that it shall not be canceled or modified without at least thirty (30) days' prior written notice to each insured named therein. Tenant's Insurance Policies may include deductibles in an amount no greater than the greater of $25,000 or commercially reasonable amounts. On or before the date on which any of the Tenant Parties shall first enter the Premises and thereafter not less than fifteen (15) days prior to the expiration date of each expiring policy, Tenant shall deliver to Landlord binders of Tenant's Insurance Policies issued by the respective insurers setting forth in full the provisions thereof together with evidence satisfactory to Landlord of the payment of all premiums for such policies. In the event of any claim, and upon Landlord's request, Tenant shall deliver to Landlord complete copies of Tenant's Insurance Policies. Upon request of Landlord, Tenant shall deliver to any Mortgagee copies of the foregoing documents.

14.2 Tenant Indemnification. Except to the extent caused by the negligence or willful misconduct of any of the Landlord Parties, Tenant shall defend, indemnify and save the Landlord Parties harmless from and against any and all Claims asserted by or on behalf of any person, firm, corporation or public authority arising from:

(a) Tenant's breach of any covenant or obligation under this Lease;

(b) Any injury to or death of any person, or loss of or damage to property, sustained or occurring in, upon, at or about the Premises;

(c) Any injury to or death of any person, or loss of or damage to property arising out of the use or occupancy of the Premises by or the negligence or willful misconduct of any of the Tenant Parties; and

(d) On account of or based upon any work or thing whatsoever done (other than by Landlord or any of the Landlord Parties) at the Premises during the Term and during the period of time, if any, prior to the Term Commencement Date that any of the Tenant Parties may have been given access to the Premises.

14.2A Landlord Indemnification. Subject to the limitations of Landlord's liability set forth in this Lease, Landlord agrees to hold Tenant harmless and to defend, exonerate and indemnify Tenant, its agents and employees from and against any and all claims, liabilities, or penalties asserted by or on behalf of any person, firm, corporation, or public authority for damage to property or injuries to persons sustained or occurring in or about the Building to the extent arising from the negligence or willful misconduct of Landlord or Landlord's agents, employees or contractors.

14.3 Property of Tenant. Tenant covenants and agrees that, to the maximum extent permitted by Legal Requirements, all of Tenant's Property at the Premises shall be at the sole risk and hazard of Tenant, and that if the whole or any part thereof shall be damaged, destroyed, stolen or removed from any cause or reason whatsoever, no part of said damage or loss shall be charged to, or borne by, Landlord, except, subject to Section 14.5 hereof, to the extent such damage or loss is due to the gross negligence or willful misconduct of any of the Landlord Parties.

14.4 Limitation of Landlord's Liability for Damage or Injury. Landlord shall not be liable for any injury or damage to persons, animals or property resulting from fire, explosion, falling plaster, steam, gas, air contaminants or emissions, electricity, electrical or electronic emanations or disturbance, water, rain or snow or leaks from any part of the Building or from the pipes, appliances, equipment or plumbing works or from the roof, street or sub-surface or from any other place or caused by dampness, vandalism, malicious mischief or by any other cause of whatever nature, except to the extent caused by or due to the gross negligence or willful misconduct of any of the Landlord Parties, and then, where notice and an opportunity to cure are appropriate (i.e., where Tenant has actual knowledge of such condition sufficiently in advance of the occurrence of any such injury or damage resulting therefrom as would have enabled Landlord to prevent such damage or loss had Tenant notified Landlord of such condition) only after (i) notice to Landlord of the condition claimed to constitute gross negligence or willful misconduct, and (ii) the expiration of a reasonable time after such notice has been received by Landlord without Landlord having commenced to take all reasonable and practicable means to cure or correct such condition; and pending such cure or correction by Landlord, Tenant shall take all reasonably prudent temporary measures and safeguards to prevent any injury, loss or damage to persons or property. Notwithstanding the foregoing, in no event shall any of the Landlord Parties be liable for any loss which is covered by insurance policies actually carried or required to be so carried by this Lease; nor shall any of the Landlord Parties be liable for any such damage caused by other tenants or persons in the Building or caused by operations in construction of any private, public, or quasi-public work; nor shall any of the Landlord Parties be liable for any latent defect in the Premises or in the Building.

14.5 Waiver of Subrogation; Mutual Release. Landlord and Tenant each hereby waives on behalf of itself and its property insurers (none of which shall ever be assigned any such claim or be entitled thereto due to subrogation or otherwise) any and all rights of recovery, claim, action, or cause of action against the other and its agents, officers, servants, partners, shareholders, or employees (collectively, the "**Related Parties**") for any loss or damage that may occur to or within the Premises or the Building or any improvements thereto, or any personal property of such party therein which is insured against under any Property Insurance (as defined in Section 14.7) policy actually being maintained by the waiving party from time to time, even if not required hereunder, or which would be insured against under the terms of any Property Insurance policy required to be carried or maintained by the waiving party hereunder, whether or not such insurance coverage is actually being maintained, including, in every instance, such loss or damage that may be caused by the negligence of the other party hereto and/or its Related Parties. Landlord and Tenant each agrees to cause appropriate clauses to be included in its Property Insurance policies necessary to implement the foregoing provisions.

14.6 Tenant's Acts–Effect on Insurance. Tenant shall not do or permit any Tenant Party to do any act or thing upon the Premises or elsewhere in the Building which will invalidate or be in conflict with any insurance policies covering the Building and the fixtures and property therein; and shall not do, or permit to be done, any act or thing upon the Premises which shall subject Landlord to any liability or responsibility for injury to any person or persons or to property by reason of any business or operation being carried on upon said Premises or for any other reason. Landlord agrees that the use of the Premises for the Contemplated Use will not, per se, violate the provisions of the immediately preceding sentence. If by reason of the failure of Tenant to comply with the provisions hereof the insurance rate applicable to any policy of insurance shall at any time thereafter be higher than it otherwise would be, Tenant shall reimburse Landlord upon demand for that part of any insurance premiums which shall have been charged because of such failure by Tenant, together with interest at the Default Rate until paid in full, within ten (10) days after receipt of an invoice therefor. In addition, Tenant shall reimburse Landlord for any increase in insurance premium arising as a result of Tenant's use and/or storage of any Hazardous Materials in the Premises.

Landlord shall carry at all times during the Term of this Lease: (i) commercial general liability insurance with respect to the Building, the Land and the Common Areas thereof in an amount not less than Five Million Dollars ($5,000,000) combined single limit per occurrence, (ii) with respect to the Building, excluding Tenant-Insured Improvements, insurance against loss or damage caused by any peril covered under fire, extended coverage and all risk insurance with coverage against vandalism, malicious mischief and such other insurable hazards and contingencies as are from time to time normally insured against by owners of similar first-class multi-tenant buildings in the City of Cambridge or which are required by Landlord's mortgagee, in an amount equal to one hundred percent (100%) of the full replacement cost thereof above foundation walls ("**Landlord Property Insurance**), and (iii) rent interruption insurance covering at least eighteen (18) months. Any and all such insurance: (x) may be maintained under a blanket policy affecting other properties of Landlord and/or its affiliated business organizations, and (y) may be written with commercially reasonable deductibles as determined by Landlord. The costs incurred by Landlord related to such insurance shall be included in Operating Expenses. Tenant Property Insurance and Landlord Property Insurance are referred to collectively herein as "**Property Insurance**".

15. CASUALTY; TAKING

15.1 Damage. If the Premises are damaged in whole or part because of fire or other casualty ("**Casualty**"), or if the Premises are subject to a taking in connection with the exercise of any power of eminent domain, condemnation, or purchase under threat or in lieu thereof (any of the foregoing, a "**Taking**"), then unless this Lease is terminated in accordance with Section 15.2 below, Landlord shall restore the Building and/or the Premises to substantially the same condition as existed immediately following completion of Landlord's Work, or in the event of a partial Taking which affects the Building and the Premises, restore the remainder of the Building and the Premises not so Taken to substantially the same condition as is reasonably feasible. If, in Landlord's reasonable judgment, any element of the Tenant-Insured Improvements can more effectively be restored as an integral part of Landlord's restoration of the Building or the Premises, such restoration shall also be made by Landlord, but at Tenant's sole cost and expense. Subject to rights of Mortgagees, Tenant Delays, Legal Requirements then in existence and to

delays for adjustment of insurance proceeds or Taking awards, as the case may be, and instances of Landlord's Force Majeure, Landlord shall substantially complete such restoration within one (1) year after Landlord's receipt of all required permits therefor with respect to substantial reconstruction of at least 50% of the Building, or, within one hundred eighty (180) days after Landlord's receipt of all required permits therefor in the case of restoration of less than 50% of the Building. Upon substantial completion of such restoration by Landlord, Tenant shall use diligent efforts to complete restoration of any Alterations performed by Tenant after the initial Tenant Improvement Work to substantially the same condition as existed immediately prior to such Casualty or Taking, as the case may be, as soon as reasonably possible. Tenant agrees to cooperate with Landlord in such manner as Landlord may reasonably request to assist Landlord in collecting insurance proceeds due in connection with any Casualty which affects the Premises or the Building. In no event shall Landlord be required to expend more than the Net (hereinafter defined) insurance proceeds Landlord receives for damage to the Premises and/or the Building or the Net Taking award attributable to the Premises and/or the Building. "**Net**" means the insurance proceeds or Taking award actually paid to Landlord (and not paid over to a Mortgagee in satisfaction of debt) less all costs and expenses, including adjusters and attorney's fees, of obtaining the same. Except as Landlord may elect pursuant to this Section 15.1, under no circumstances shall Landlord be required to repair any damage to, or make any repairs to or replacements of, any Tenant-Insured Improvements.

15.2 Termination Rights.

(a) Landlord's Termination Rights. In the event of a Casualty affecting the Building, Landlord may terminate this Lease upon thirty (30) days' prior written notice to Tenant if:

(i) if the estimated time to complete restoration exceeds one (1) year from the date on which Landlord receives all required permits for such restoration; or

(ii) the cost of repairing the damage caused by such Casualty is not covered by casualty insurance required to be carried by Landlord pursuant to this Lease, and such cost exceeds five (5%) percent of the then replacement cost of the Building.

(b) Tenant's Termination Right. If neither party elects to terminate the Lease pursuant to its rights under any other section of the Lease, and Landlord is so required but fails to complete restoration of the Premises within the time frames and subject to the conditions set forth in Section 15.1 above, then Tenant may terminate this Lease upon thirty (30) days' written notice to Landlord; provided, however, that if Landlord completes such restoration within thirty (30) days after receipt of any such termination notice, such termination notice shall be null and void and this Lease shall continue in full force and effect. The remedies set forth in this Section 15.2(b) and in Section 15.2(c) below are Tenant's sole and exclusive rights and remedies based upon Landlord's failure to complete the restoration of the Premises following a Casualty as set forth herein. Notwithstanding anything to the contrary contained herein, Tenant shall not have the right to terminate this Lease pursuant to this Section 15 if the Casualty was caused by the intentional misconduct of any Tenant Party.

(c) Either Party May Terminate. In the case of any Casualty or Taking affecting the Premises occurring during the last twelve (12) months of the Term, then: (i) if such Casualty or Taking results in more than twenty-five percent (25%) of the floor area of the Premises being unsuitable for the Permitted Uses, or (ii) the damage to the Premises is estimated to cost more than $250,000 to restore, then either Landlord or Tenant shall have the option to terminate this Lease upon thirty (30) days' written notice to the other. In addition, if Landlord's Mortgagee does not release sufficient insurance proceeds to cover the cost of Landlord's restoration obligations, then Landlord shall (i) notify Tenant thereof, and (ii) have the right to terminate this Lease. If Landlord does not terminate this Lease pursuant to the previous sentence and such notice by Landlord does not include an agreement by Landlord to pay for the difference between the cost of such restoration and such released insurance proceeds, then Tenant may terminate this Lease by written notice to Landlord on or before the date that is thirty (30) days after such notice. Notwithstanding anything to the contrary contained in this Section 15, in no event may Tenant elect to terminate this Lease hereunder if the Casualty that would otherwise give rise to such right results from the willful misconduct of Tenant, its agents, contractors, or employees.

(d) Automatic Termination. In the case of a Taking of the entire Premises, then this Lease shall automatically terminate as of the date of possession by the Taking authority.

15.3 Rent Abatement. In the event of a Casualty affecting the Premises, there shall be an equitable adjustment of Base Rent, Operating Costs and Taxes based upon the degree to which Tenant's ability to conduct its business in the Premises is impaired by reason of such Casualty during the following time period: (i) from and after the date of a Casualty, and continuing until the following portions of the repair and restoration work to be performed by Landlord, as set forth above, are substantially completed: (i) any repair and restoration work to be performed by Landlord within the Premises, and (ii) repair and restoration work with respect to the common areas of the Building and the Property to the extent that damage to the common areas of the Property caused by such Casualty affect Tenant's use of, or access to, the Premises.

15.4 Taking for Temporary Use. If the Premises are Taken for temporary use, this Lease and Tenant's obligations, including, without limitation, the payment of Rent, shall continue. For purposes hereof, a "**Taking for temporary use**" shall mean a Taking of ninety (90) days or less.

15.5 Disposition of Awards. Except for any separate award for Tenant's movable trade fixtures, relocation expenses, and unamortized leasehold improvements paid for by Tenant (provided that the same may not reduce Landlord's award), all Taking awards to Landlord or Tenant shall be Landlord's property without Tenant's participation, and Tenant hereby assigns to Landlord Tenant's interest, if any, in such award. Tenant may pursue its own claim against the Taking authority.

16. ESTOPPEL CERTIFICATE.

Each party ("**Responding Party**") shall at any time and from time to time upon not less than ten (10) business days' prior written notice from the other party ("**Requesting Party**"), execute, acknowledge and deliver to the Requesting Party a statement in writing certifying: (i)

that this Lease is unmodified and in full force and effect (or if there have been modifications, that the same is in full force and effect as modified and stating the modifications), (ii) the dates to which Rent has been paid, (iii) stating, to the Responding Party's knowledge, whether or not the Requesting Party is in default in performance of any covenant, agreement, term, provision or condition contained in this Lease and, if so, specifying each such default, and (iv) to the best of the knowledge of the Responding Party (without the requirement to perform any investigations requiring the assistance of third parties), such other facts relating to the Lease as Requesting Party may reasonably request, it being intended that any such statement delivered pursuant hereto may be relied upon by any prospective purchaser of the Building or of any interest of Landlord therein, any Mortgagee or prospective Mortgagee thereof, any lessor or prospective lessor thereof, any lessee or prospective lessee thereof, any prospective assignee of any mortgage thereof, or any prospective transferee of Tenant's interest in the Lease or the Premises, or any portion thereof. *Time is of the essence with respect to any such requested certificate*, Tenant hereby acknowledging the importance of such certificates in mortgage financing arrangements, prospective sales and the like.

17. HAZARDOUS MATERIALS

17.1 Prohibition. Tenant shall not, without the prior written consent of Landlord, bring or permit to be brought or kept in or on the Premises or elsewhere in the Building or the Property (i) any inflammable, combustible or explosive fluid, material, chemical or substance (except for standard office supplies stored in proper containers); and (ii) any Hazardous Material (hereinafter defined), other than the types and quantities of Hazardous Materials which are listed on Exhibit 8-1 attached hereto ("**Tenant's Hazardous Materials**"), provided that the same shall at all times be brought upon, kept or used in so-called 'control areas' (the number and size of which shall be reasonably determined by Landlord) and in accordance with all applicable Environmental Laws (hereinafter defined) and prudent environmental practice and (with respect to medical waste and so-called "biohazard" materials) good scientific and medical practice. Tenant shall be responsible for assuring that all laboratory uses are adequately and properly vented. On or before each anniversary of the Rent Commencement Date, and on any earlier date during the 12-month period on which Tenant intends to add a new Hazardous Material or materially increase the quantity of any Hazardous Material to the list of Tenant's Hazardous Materials, Tenant shall submit to Landlord an updated list of Tenant's Hazardous Materials for Landlord's review and approval, which approval shall not be unreasonably withheld, conditioned or delayed. Landlord shall have the right, from time to time, to inspect the Premises for compliance with the terms of this Section 17.1. Notwithstanding the foregoing, with respect to any of Tenant's Hazardous Materials which Tenant does not properly handle, store or dispose of in compliance with all applicable Environmental Laws (hereinafter defined), prudent environmental practice and (with respect to medical waste and so-called "biohazard materials) good scientific and medical practice, Tenant shall, upon written notice from Landlord, no longer have the right to bring such material into the Building or the Property until Tenant has demonstrated, to Landlord's reasonable satisfaction, that Tenant has implemented programs to thereafter properly handle, store or dispose of such material. In order to induce Landlord to waive its otherwise applicable requirement that Tenant maintain insurance in favor as Landlord against liability arising from the presence of radioactive materials in the Premises, and without limiting the foregoing, Tenant hereby represents and warrants to Landlord that at no time during the Term will Tenant bring upon, or permit to be brought upon, the Premises any radioactive materials whatsoever.

17.2 Environmental Laws. For purposes hereof, "**Environmental Laws**" shall mean all laws, statutes, ordinances, rules and regulations of any local, state or federal governmental authority having jurisdiction concerning environmental, health and safety matters, including but not limited to any discharge by any of the Tenant Parties into the air, surface water, sewers, soil or groundwater of any Hazardous Material (hereinafter defined) whether within or outside the Premises, including, without limitation (a) the Federal Water Pollution Control Act, 33 U.S.C. Section 1251 et seq., (b) the Federal Resource Conservation and Recovery Act, 42 U.S.C. Section 6901 et seq., (c) the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. Section 9601 et seq., (d) the Toxic Substances Control Act of 1976, 15 U.S.C. Section 2601 et seq., and (e) Chapter 21E of the General Laws of Massachusetts. Tenant, at its sole cost and expense, shall comply with (i) Environmental Laws, and (ii) any rules, requirements and safety procedures of the Massachusetts Department of Environmental Protection, the City of Cambridge and any insurer of the Building or the Premises with respect to Tenant's use, storage and disposal of any Hazardous Materials.

17.3 Hazardous Material Defined. As used herein, the term "**Hazardous Material**" means asbestos, oil or any hazardous, radioactive or toxic substance, material or waste or petroleum derivative which is or becomes regulated by any Environmental Law, including without limitation live organisms, viruses and fungi, medical waste and any so-called "biohazard" materials. The term "**Hazardous Material**" includes, without limitation, oil and/or any material or substance which is (i) designated as a "hazardous substance," "hazardous material," "oil," "hazardous waste" or toxic substance under any Environmental Law.

17.4 Testing. If any Mortgagee or governmental authority requires testing to determine whether there has been any release of Hazardous Materials and such testing is required as a result of the acts or omissions of any of the Tenant Parties, then Tenant shall reimburse Landlord upon demand, as additional rent, for the reasonable costs thereof, together with interest at the Default Rate until paid in full. Tenant shall execute affidavits, certifications and the like, as may be reasonably requested by Landlord from time to time concerning Tenant's best knowledge and belief concerning the presence of Hazardous Materials in or on the Premises, the Building or the Property. In addition to the foregoing, if Landlord reasonably believes that any Hazardous Materials have been released on the Premises in violation of this Lease or any Legal Requirement, Landlord shall have the right to conduct appropriate tests of the Premises or any portion thereof to demonstrate that Hazardous Materials are present or that contamination has occurred due to the acts or omissions of any of the Tenant Parties. Tenant shall pay all reasonable costs of such tests to the extent that such tests reveal that Hazardous Materials exist at the Premises in violation of this Lease or any Legal Requirements as a result of the acts or omissions of any of the Tenant Parties. Further, Landlord shall have the right to cause a third party consultant retained by Landlord, at Landlord's expense (provided, however, that such costs shall be included in Operating Costs), to review, but not more than once in any calendar year, Tenant's lab operations, procedures and permits to ascertain whether or not Tenant is complying with law and adhering to best industry practices. Tenant agrees to cooperate in good faith with any such review and to provide to such consultant any information requested by such consultant and reasonably required in order for such consultant to perform such review, but nothing contained herein shall require Tenant to provide proprietary or confidential information to such consultant.

17.5 Indemnity; Remediation.

(a) Tenant hereby covenants and agrees to indemnify, defend and hold the Landlord Parties harmless from and against any and all Claims against any of the Landlord Parties arising out of contamination of any part of the Property or other adjacent property, to the extent that such contamination arises as a result of: (i) the presence of Hazardous Material in the Premises, the presence of which is caused by any act or omission of any of the Tenant Parties, or (ii) from a breach by Tenant of its obligations under this Section 17. This indemnification of the Landlord Parties by Tenant includes, without limitation, reasonable costs incurred in connection with any investigation of site conditions or any cleanup, remedial, removal or restoration work required by any federal, state or local governmental agency or political subdivision because of Hazardous Material present in the soil or ground water on or under the Building based upon the circumstances identified in the first sentence of this Section 17.5. The indemnification and hold harmless obligations of Tenant under this Section 17.5 shall survive the expiration or any earlier termination of this Lease. Without limiting the foregoing, to the extent that the presence of any Hazardous Material in the Building or otherwise in the Property is caused or permitted by any of the Tenant Parties and results in any contamination of any part of the Property or any adjacent property, Tenant shall promptly take all actions at Tenant's cost and expense as are necessary to return the Property and/or the Building or any adjacent property to their condition as of the date of this Lease, provided that Tenant shall first obtain Landlord's written approval of such actions, which approval shall not be unreasonably withheld, conditioned or delayed so long as such actions, in Landlord's reasonable discretion, would not potentially have any adverse effect on the Property, and, in any event, Landlord shall not withhold its approval of any proposed actions which are required by applicable Environmental Laws. The provisions of this Section 17.5 shall survive the expiration or earlier termination of the Lease.

(b) Without limiting the obligations set forth in Section 17.5(a) above, if any Hazardous Material is in, on, under, at or about the Building or the Property as a result of the acts or omissions of any of the Tenant Parties and results in any contamination of any part of the Property or any adjacent property that is in violation of any applicable Environmental Law or that requires the performance of any response action pursuant to any Environmental Law, Tenant shall promptly take all actions at Tenant's sole cost and expense as are necessary to reduce such Hazardous Material to amounts below any applicable Reportable Quantity, any applicable Reportable Concentration and any other applicable standard set forth in any Environmental Law; provided that Tenant shall first obtain Landlord's written approval of such actions, which approval shall not be unreasonably withheld, conditioned or delayed so long as such actions would not be reasonably expected to have an adverse effect on the market value or utility of the Property for the Permitted Uses, and in any event, Landlord shall not withhold its approval of any proposed actions which are required by applicable Environmental Laws (such approved actions, "**Tenant's Remediation**").

(c) In the event that Tenant fails to complete Tenant's Remediation prior to the end of the Term, then:

(i) until the completion of Tenant's Remediation (as evidenced by the certification of Tenant's Licensed Site Professional (as such term is defined by applicable Environmental Laws), who shall be reasonably acceptable to Landlord) (the "**Remediation Completion Date**), Tenant shall pay to Landlord, with respect to the portion of the Premises which reasonably cannot be occupied by a new tenant until completion of Tenant's Remediation, (A) Additional Rent on account of Operating Costs and Taxes and (B) Base Rent in an amount equal to the greater of (1) the fair market rental value of such portion of the Premises (determined in substantial accordance with the process described in Section 1.2 above), and (2) Base Rent attributable to such portion of the Premises in effect immediately prior to the end of the Term; and

(ii) Tenant shall maintain responsibility for Tenant's Remediation and Tenant shall complete Tenant's Remediation as soon as reasonably practicable in accordance with Environmental Laws. If Tenant does not diligently pursue completion of Tenant's Remediation, Landlord shall have the right to either (A) assume control for overseeing Tenant's Remediation, in which event Tenant shall pay all reasonable costs and expenses of Tenant's Remediation (it being understood and agreed that all costs and expenses of Tenant's Remediation incurred pursuant to contracts entered into by Tenant shall be deemed reasonable) within thirty (30) days of demand therefor (which demand shall be made no more often than monthly), and Landlord shall be substituted as the party identified on any governmental filings as the party responsible for the performance of such Tenant's Remediation or (B) require Tenant to maintain responsibility for Tenant's Remediation, in which event Tenant shall complete Tenant's Remediation as soon as reasonably practicable in accordance with Environmental Laws, it being understood that Tenant's Remediation shall not contain any requirement that Tenant remediate any contamination to levels or standards more stringent than those associated with the Property's current office, research and development, laboratory, and vivarium uses.

(d) The provisions of this Section 17.5 shall survive the expiration or earlier termination of this Lease.

17.6 Disclosures. Prior to bringing any Hazardous Material into any part of the Property, Tenant shall deliver to Landlord the following information with respect thereto: (a) a description of handling, storage, use and disposal procedures; (b) all plans or disclosures and/or emergency response plans which Tenant has prepared, including without limitation Tenant's Spill Response Plan, and all plans which Tenant is required to supply to any governmental agency or authority pursuant to any Environmental Laws; (c) copies of all Required Permits relating thereto; and (d) other information reasonably requested by Landlord.

17.7 Removal. Tenant shall be responsible, at its sole cost and expense, for Hazardous Material and other biohazard disposal services for the Premises. Such services shall be performed by contractors reasonably acceptable to Landlord and on a sufficient basis to ensure that the Premises are at all times kept neat, clean and free of Hazardous Materials and biohazards except in appropriate, specially marked containers reasonably approved by Landlord.

17.8 Landlord Obligations with respect to Hazardous Materials.

(a) Landlord Representations, Covenants and Indemnity. Landlord hereby represents and warrants to Tenant that, to the Best of Landlord's Knowledge (as that term is defined in Section 25.17 below) as of the Execution Date, that except to the extent (if any) as may be disclosed in the environmental assessment report listed on **Exhibit 8-2** (the "**Disclosed Materials**"), there are no Hazardous Materials in the Premises (any Hazardous Materials which exist in the Premises as of the Execution Date in breach of the foregoing representation are hereinafter referred to as "**Landlord Representation HM**"). Notwithstanding anything to the contrary in this Section 17 contained, in no event shall Tenant have any obligations to Landlord with respect to Disclosed Materials, except to the extent that Tenant or any Tenant Party exacerbates any the adverse effect of any Disclosed Materials on the Building or the Property. Landlord covenants that neither Landlord, nor Landlord's agents, employees, or contractors shall bring any Hazardous Materials in or on the Premises or the Property in violation of applicable Environmental Laws (any Hazardous Materials which are introduced to the Premises by Landlord, or Landlord's agents, employees or contractors in breach of the foregoing covenant are referred to herein as "**Landlord Breach HM**". Landlord hereby indemnifies and shall defend and hold Tenant, its officers, directors, employees, and agents harmless from any Claims arising as result of any breach by Landlord of its representations, warranties, or covenants under this Section 17.8(a). The indemnification and hold harmless obligations of Landlord under this Section 17.8 shall survive the expiration or any earlier termination of this Lease.

(b) Rent Abatement. In the event that: (i) there it is determined that Landlord Representation HM exist in the Premises or Landlord Breach HM are introduced in or on the Property, and (ii) the existence or remediation of such Landlord Representation HM or Landlord Breach HM materially interferes with Tenant's use and enjoyment of the Premises, or any portion thereof (any such event, a "**Landlord HM Event**"), and (iii) such Landlord HM Event shall continue for the applicable Landlord HM Cure Period, as hereinafter defined (an event that satisfies the foregoing conditions (i)-(iii) being referred to hereinafter as an "**Landlord HM Interruption**") then Tenant shall be entitled to an equitable abatement of Base Rent, Operating Costs and Taxes based on the nature and duration of the Landlord HM Interruption and the area of the Premises affected, for any and all days ("**Landlord HM Abatement Period**") following the applicable Landlord HM Cure Period that both (x) the Landlord HM Interruption is continuing and (y) Tenant does not use such affected areas of the Premises for a bona fide business purpose. The "**Landlord HM Cure Period**" shall be defined as follows: (1) with respect to Landlord Representation HM, there shall be no Landlord HM Cure Period and the Landlord HM Abatement Period shall commence immediately upon receipt by Landlord of written notice from Tenant describing such Landlord Representation HM and its effect on Tenant's use of the Premises, and (2) with respect to Landlord Breach HM, the Landlord HM Cure Period shall be five (5) consecutive business days following receipt by Landlord of written notice (the "**Landlord HM Notice**") from Tenant describing such Landlord Breach HM and its effect on Tenant's use of the Premises; provided however that the Landlord HM Cure Period with respect to any Landlord Breach HM shall be extended by reason of any delays in Landlord's ability to remediate such Landlord HM Event because of Landlord's Force Majeure, provided however, that in no event shall the Landlord HM Cure Period with respect to any Landlord Breach HM be longer than ten (10) consecutive business days after Landlord receives the applicable Landlord HM Notice.

(c) Landlord Remediation. If Hazardous Materials are discovered in, on or under the Property which are not in compliance with applicable Environmental Laws, and which are not the responsibility of Tenant pursuant to this Article 17, then Landlord shall remove or remediate the same, when, if, and in the manner required by applicable Environmental Laws.

18. RULES AND REGULATIONS.

18.1 Rules and Regulations. Tenant will faithfully observe and comply with the Rules and Regulations attached hereto as Exhibit 9, and reasonable rules and regulations as may be promulgated, from time to time, with respect to the Building, the Property and construction within the Property, provided that a copy of such any changes the Rules and Regulations is given to Tenant in advance (collectively, the "**Rules and Regulations**"). Landlord hereby agrees that: (i) any future Rules and Regulations shall not discriminate among similarly situated tenants, and (ii) in enforcing any Rules and Regulations, Landlord will not discriminate among similarly situated tenants. In the case of any conflict between the provisions of this Lease and any future rules and regulations, the provisions of this Lease shall control. Nothing contained in this Lease shall be construed to impose upon Landlord any duty or obligation to enforce the Rules and Regulations or the terms, covenants or conditions in any other lease as against any other tenant and Landlord shall not be liable to Tenant for violation of the same by any other tenant, its servants, employees, agents, contractors, visitors, invitees or licensees.

18.2 Energy Conservation. Landlord may institute upon written notice to Tenant such reasonable, non-discriminatory (as among similarly situated tenants) policies, programs and measures as may be necessary, required, or expedient for the conservation and/or preservation of energy or energy services (collectively, the "**Conservation Program**"), if such Conservation Program is either: (i) then being provided in comparable combination laboratory, research and development and office buildings in the vicinity of the Premises, provided however, that the Conservation Program does not, by reason of such policies, programs and measures, reduce the level of energy or energy services being provided to the Premises below the level of energy or energy services then being provided in comparable combination laboratory, research and development and office buildings in the vicinity of the Premises, or (ii) required by Legal Requirements. Upon receipt of such notice, Tenant shall comply with the Conservation Program.

18.3 Recycling. Upon written notice, Landlord may establish reasonable, non-discriminatory (as among similarly situated tenants) policies, programs and measures for the recycling of paper, products, plastic, tin and other materials (a "**Recycling Program**"). Upon receipt of such notice, Tenant will comply with the Recycling Program at Tenant's sole cost and expense.

19. LAWS AND PERMITS.

19.1 Legal Requirements.

(a) Tenant Obligations. Tenant shall not either: (i) cause, or (ii) permit any Tenant Party to use the Premises, or cause the Property or the Building to be used in any way that (1) violates any Legal Requirement, (2) violates any governmental permit, approval, variance,

covenant or restrictions of record affecting the Property as of the Execution Date, (3) violates any provisions of this Lease, (4) interferes, in any material way, with the rights of tenants of the Building, or (5) constitutes a material nuisance or waste. Tenant shall obtain, maintain and pay for all permits and approvals needed for the operation of Tenant's business, as soon as reasonably possible, and in any event shall not undertake any operations unless all applicable permits and approvals are in place and shall, promptly take all actions necessary to comply with all Legal Requirements, including, without limitation, the Occupational Safety and Health Act, applicable to Tenant's use of the Premises, the Property or the Building. Tenant shall maintain in full force and effect all certifications or permissions required by any authority having jurisdiction to authorize, franchise or regulate Tenant's use of the Premises. Tenant shall be solely responsible for procuring and complying at all times with any and all necessary permits and approvals directly or indirectly relating or incident to: the conduct of its activities on the Premises; its scientific experimentation, transportation, storage, handling, use and disposal of any chemical or radioactive or bacteriological or pathological substances or organisms or other hazardous wastes or environmentally dangerous substances or materials or medical waste or animals or laboratory specimens. Notwithstanding the foregoing, Landlord shall cooperate with Tenant in such manner as Tenant may reasonably request in procuring any permits and approvals necessary to enable Tenant to conduct its activities in the Premises consistent with the Contemplated Use, provided however, that Landlord shall not be required to incur any cost or liability in providing such cooperation. Within ten (10) Business Days of a request by Landlord, which request shall be made not more than once during each period of twelve (12) consecutive months during the Term hereof, unless otherwise requested by any mortgagee of Landlord or unless Landlord reasonably suspects that Tenant has violated the provisions of this Section 19.1, Tenant shall furnish Landlord with copies of all such permits and approvals that Tenant possesses or has obtained together with a certificate certifying that such permits are all of the permits that Tenant possesses or has obtained with respect to the Premises. Tenant shall promptly give written notice to Landlord of any warnings or violations relative to the above received in writing from any federal, state or municipal agency or by any court of law and shall promptly cure the conditions causing any such violations. Tenant shall not be deemed to be in default of its obligations under the preceding sentence to promptly cure any condition causing any such violation in the event that, in lieu of such cure, Tenant shall contest the validity of such violation by appellate or other proceedings permitted under applicable law, provided that: (i) any such contest is made reasonably and in good faith, (ii) Tenant shall agree to indemnify, defend (with counsel reasonably acceptable to Landlord) and hold Landlord harmless from and against any and all liability, costs, damages, or expenses to the extent arising in connection with such condition and/or violation, (iii) Tenant shall promptly cure any violation in the event that its appeal of such violation is finally overruled or rejected (without further opportunity to appeal), and (iv) Tenant's decision to delay such cure shall not, in Landlord's good faith determination, be likely to result in any actual or threatened bodily injury, property damage, or any civil or criminal liability to Landlord, any tenant or occupant of the Building or the Property, or any other person or entity. Nothing contained in this Section 19.1 shall be construed to expand the uses permitted hereunder beyond the Permitted Uses.

(b) Landlord Obligations. Landlord shall comply with any Legal Requirements and with any direction of any public office or officer relating to the repair, maintenance and operation of: (i) the structural elements of the Building and common Building systems, (ii) the Common Areas, and (iii) any other portions of the Property that the Landlord is obligated to repair, and the costs so incurred by Landlord may be included in Operating Costs, subject to, and in accordance with, the provisions of Section 5.2.

20. DEFAULT

20.1 Events of Default. The occurrence of any one or more of the following events shall constitute an "**Event of Default**" hereunder by Tenant:

(a) If Tenant fails to make any payment of Rent or any other payment required hereunder, as and when due, and such failure shall continue for a period of five (5) business days after written notice thereof from Landlord to Tenant, provided, however, an Event of Default shall occur hereunder without any obligation of Landlord to give any notice if (i) Tenant fails to make any payment within five (5) business days after the due date therefor, and (ii) Landlord has given Tenant written notice under this Section 20.1(a) on more than two (2) occasions during the twelve (12) month interval preceding such failure by Tenant;

(b) If Tenant shall abandon the Premises (provided, however, that if Tenant merely vacates the Premises or a portion thereof, but continues to perform all of its obligations under this Lease, the same shall not, in and of itself, constitute abandonment);

(c) If Tenant shall fail to execute and deliver to Landlord an estoppel certificate pursuant to Section 16 above or a subordination and attornment agreement pursuant to Section 22 below, within the timeframes set forth therein;

(d) If Tenant shall fail to maintain any insurance required hereunder;

(e) If Tenant causes or suffers any release of Hazardous Materials in or near the Property;

(f) If Tenant shall make a Transfer in violation of the provisions of Section 13 above, or if any event shall occur or any contingency shall arise whereby this Lease, or the term and estate thereby created, would (by operation of law or otherwise) devolve upon or pass to any person, firm or corporation other than Tenant, except as expressly permitted under Section 13 hereof;

(g) The failure by Tenant to observe or perform any of the covenants or provisions of this Lease to be observed or performed by Tenant, other than as specified above, and such failure continues for more than thirty (30) days after notice thereof from Landlord; provided, further, that if the nature of Tenant's default is such that more than thirty (30) days are reasonably required for its cure, then Tenant shall not be deemed to be in default if Tenant shall commence such cure within said thirty (30) day period and thereafter diligently prosecute such cure to completion;

(h) Tenant shall make an assignment or trust mortgage, or other conveyance or transfer of like nature, of all or a substantial part of its property for the benefit of its creditors,

(i) an attachment on mesne process, on execution or otherwise, or other legal process shall issue against Tenant or its property and a sale of any of its assets shall be held thereunder, and shall not be dismissed or vacated within sixty (60) days thereafter;

(j) any judgment, attachment or the like in excess of $100,000 shall be entered, recorded or filed against Tenant in any court, registry, etc. and Tenant shall fail to pay such judgment within sixty (60) days after the judgment shall have become final beyond appeal or to discharge or secure by surety bond such lien, attachment, etc. within sixty (60) days of such entry, recording or filing, as the case may be;

(k) the leasehold hereby created shall be taken on execution or by other process of law and shall not be revested in Tenant within sixty (60) days thereafter;

(1) a receiver, sequesterer, trustee or similar officer shall be appointed by a court of competent jurisdiction to take charge of all or any part of Tenant's Property and such appointment shall not be vacated within sixty (60) days; or

(m) any proceeding shall be instituted by or against Tenant pursuant to any of the provisions of any Act of Congress or State law relating to bankruptcy, reorganizations, arrangements, compositions or other relief from creditors, and, in the case of any proceeding instituted against it, if Tenant shall fail to have such proceedings dismissed within sixty (60) days or if Tenant is adjudged bankrupt or insolvent as a result of any such proceeding.

Wherever "Tenant" is used in subsections (h), (i), (j), (1), or (m) of this Section 20.1, it shall be deemed to include any parent entity of Tenant and any guarantor of any of Tenant's obligations under this Lease.

20.2 Remedies. Upon an Event of Default, Landlord may, by notice to Tenant, elect to terminate this Lease; and thereupon (and without prejudice to any remedies which might otherwise be available for arrears of Rent or preceding breach of covenant or agreement and without prejudice to Tenant's liability for damages as hereinafter stated), upon the giving of such notice, this Lease shall terminate as of the date specified therein as though that were the Expiration Date. Without being taken or deemed to be guilty of any manner of trespass or conversion, and without being liable to indictment, prosecution or damages therefor, Landlord may thereafter, by lawful process, enter into and upon the Premises (or any part thereof in the name of the whole); repossess the same, as of its former estate; and expel Tenant and those claiming under Tenant. The words "re-entry" and "re-enter" as used in this Lease are not restricted to their technical legal meanings.

20.3 Damages Termination.

(a) Upon the termination of this Lease under the provisions of this Section 20, Tenant shall pay to Landlord Rent up to the time of such termination, shall continue to be liable for any preceding breach of covenant, and in addition, shall pay to Landlord as damages, at the election of Landlord, either:

(i) the amount (discounted to present value at the rate of five percent (5%) per annum) by which, at the time of the termination of this Lease (or at any time

thereafter if Landlord shall have initially elected damages under Section 20.3(a)(ii) below), (x) the aggregate of Rent projected over the period commencing with such termination and ending on the Expiration Date, exceeds (y) the aggregate projected rental value of the Premises for such period, taking into account a reasonable time period during which the Premises shall be unoccupied, plus all Reletting Costs (hereinafter defined); or

(ii) amounts equal to Rent which would have been payable by Tenant had this Lease not been so terminated, payable upon the due dates therefor specified herein following such termination and until the Expiration Date, *provided*, *however*, if Landlord shall re-let the Premises during such period, that Landlord shall credit Tenant with the net rents received by Landlord from such re-letting, such net rents to be determined by first deducting from the gross rents as and when received by Landlord from such re-letting the expenses incurred or paid by Landlord in terminating this Lease, as well as the expenses of re-letting, including altering and preparing the Premises for new tenants, brokers' commissions, and all other similar expenses properly chargeable against the Premises and the rental therefrom (collectively, "**Reletting Costs**"), it being understood that any such re-letting may be for a period equal to or shorter or longer than the remaining Term; and *provided*, *further*, that (x) in no event shall Tenant be entitled to receive any excess of such net rents over the sums payable by Tenant to Landlord hereunder and (y) in no event shall Tenant be entitled in any suit for the collection of damages pursuant to this Section 20.3(a)(ii) to a credit in respect of any net rents from a re-letting except to the extent that such net rents are actually received by Landlord prior to the commencement of such suit. If the Premises or any part thereof should be re-let in combination with other space, then proper apportionment on a square foot area basis shall be made of the rent received from such re-letting and of the expenses of re-letting.

(b) In calculating the amount due under Section 20.3(a)(i), above, there shall be included, in addition to the Base Rent, all other considerations agreed to be paid or performed by Tenant, including without limitation Tenant's Share of Operating Costs and Taxes, on the assumption that all such amounts and considerations would have increased at the rate of five percent (5%) per annum for the balance of the full term hereby granted.

(c) Suit or suits for the recovery of such damages, or any installments thereof, may be brought by Landlord from time to time at its election, and nothing contained herein shall be deemed to require Landlord to postpone suit until the date when the Term would have expired if it had not been terminated hereunder.

(d) Nothing herein contained shall be construed as limiting or precluding the recovery by Landlord against Tenant of any sums or damages to which, in addition to the damages particularly provided above, Landlord may lawfully be entitled by reason of any Event of Default hereunder.

(e) Landlord agrees to use reasonable efforts to relet the Premises after Tenant vacates the Premises in the event that the Lease is terminated based upon a default by Tenant hereunder. Marketing of Tenant's Premises in a manner similar to the manner in which Landlord markets other premises within Landlord's control in the Building shall be deemed to have satisfied Landlord's obligation to use "reasonable efforts." In no event shall Landlord be required

to (i) solicit or entertain negotiations with any other prospective tenants for the Premises until Landlord obtains full and complete possession of the Premises including, without limitation, the final and unappealable legal right to re-let the Premises free of any claim of Tenant, (ii) relet the Premises before leasing other vacant space in the Building, or (iii) lease the Premises for a rental less than the current fair market rental then prevailing for similar office space in the Building.

20.4 Landlord's Self-Help; Fees and Expenses. If Tenant shall default in the performance of any covenant on Tenant's part to be performed in this Lease contained, including without limitation the obligation to maintain the Premises in the required condition pursuant to Section 10.1 above, Landlord may, if Tenant fails to cure such default after receiving thirty (30) days advance written notice from Landlord, or such longer period as Tenant may require to cure such default, provided that Tenant commences to cure such default within such thirty (30) day period and thereafter diligently prosecutes such cure to completion (except that Landlord may exercise its rights under this Section 20.4 without prior notice to Tenant in an emergency), perform the same for the account of Tenant. Tenant shall pay to Landlord upon demand therefor any costs incurred by Landlord in connection therewith, together with interest at the Lease Interest Rate until paid in full. In addition, Tenant shall pay all of Landlord's costs and expenses, including without limitation reasonable out of pocket attorneys' fees, incurred: (i) in enforcing any obligation of Tenant under this Lease, or (ii) as a result of Landlord or any of the Landlord Parties, without its fault, being made party to any litigation pending by or against any of the Tenant Parties.

20.5 Waiver of Redemption, Statutory Notice and Grace Periods. Tenant does hereby waive and surrender all rights and privileges which it might have under or by reason of any present or future Legal Requirements to redeem the Premises or to have a continuance of this Lease for the Term hereby demised after being dispossessed or ejected therefrom by process of law or under the terms of this Lease or after the termination of this Lease as herein provided. Except to the extent prohibited by Legal Requirements, any statutory notice and grace periods provided to Tenant by law are hereby expressly waived by Tenant.

20.6 Landlord's Remedies Not Exclusive. The specified remedies to which Landlord may resort hereunder are cumulative and are not intended to be exclusive of any remedies or means of redress to which Landlord may at any time be lawfully entitled, and Landlord may invoke any remedy (including the remedy of specific performance) allowed at law or in equity as if specific remedies were not herein provided for.

20.7 No Waiver. Landlord's failure to seek redress for violation, or to insist upon the strict performance, of any covenant or condition of this Lease, or any of the Rules and Regulations promulgated hereunder, shall not prevent a subsequent act, which would have originally constituted a violation, from having all the force and effect of an original violation. The receipt by Landlord of Rent with knowledge of the breach of any covenant of this Lease shall not be deemed a waiver of such breach. The failure of Landlord to enforce any of such Rules and Regulations against Tenant and/or any other tenant in the Building shall not be deemed a waiver of any such Rules and Regulations. No provisions of this Lease shall be deemed to have been waived by either party unless such waiver be in writing signed by such party. No payment by Tenant or receipt by Landlord of a lesser amount than the Rent herein stipulated shall be deemed to be other than on account of the stipulated Rent, nor shall any

endorsement or statement on any check or any letter accompanying any check or payment as Rent be deemed an accord and satisfaction, and Landlord may accept such check or payment without prejudice to Landlord's right to recover the balance of such Rent or pursue any other remedy in this Lease provided.

20.8 Restrictions on Tenant's Rights. During the continuation of any material monetary Event of Default, (a) Landlord shall not be obligated to provide Tenant with any notice pursuant to Sections 2.3 and 2.4 above; and (b) Tenant shall not have the right to make, nor to request Landlord's consent or approval with respect to, any Alterations or Transfers.

20.9 Landlord Default. Notwithstanding anything to the contrary contained in the Lease, Landlord shall in no event be in default in the performance of any of Landlord's obligations under this Lease unless Landlord shall have failed to perform such obligations within thirty (30) days (or such additional time as is reasonably required to correct any such default, provided Landlord commences cure within 30 days) after notice by Tenant to Landlord properly specifying wherein Landlord has failed to perform any such obligation, provided however, that the provisions of this sentence shall not affect or delay Tenant's rights and remedies under Section 10.7 of this Lease. Except as expressly set forth in this Lease, Tenant shall not have the right to terminate or cancel this Lease or to withhold rent or to set-off or deduct any claim or damages against rent as a result of any default by Landlord or breach by Landlord of its covenants or any warranties or promises hereunder, unless same continues after notice to Landlord thereof and a opportunity for Landlord to cure the same as set forth above. In addition, except as set forth in Section 10.7(d), Tenant shall not assert any right to deduct the cost of repairs or any monetary claim against Landlord from rent thereafter due and payable under this Lease.

21. SURRENDER; ABANDONED PROPERTY; HOLD- OVER

21.1 Surrender

(a) Upon the expiration or earlier termination of the Term, Tenant shall (i) peaceably quit and surrender to Landlord the Premises (including without limitation all fixed lab benches, fume hoods, electric, plumbing, heating and sprinkling systems, fixtures and outlets, vaults, paneling, molding, shelving, radiator enclosures, cork, rubber, linoleum and composition floors, ventilating, silencing, air conditioning and cooling equipment therein and all other furniture, fixtures, and equipment that was either provided by Landlord or paid for in whole or in part by any allowance provided to Tenant by Landlord under this Lease) broom clean, in good order, repair and condition excepting only ordinary wear and tear and damage by fire or other insured Casualty; (ii) remove all of Tenant's Property, all autoclaves and cage washers and, to the extent specified by Landlord at the time of granting of its consent, Alterations made by Tenant; and (iii) repair any damages to the Premises or the Building caused by the installation or removal of Tenant's Property and/or such Alterations. Tenant's obligations under this Section 21.1(a) shall survive the expiration or earlier termination of this Lease.

(b) Prior to the expiration of this Lease (or within thirty (30) days after any earlier termination), except with respect to any Disclosed Materials, Tenant shall clean and otherwise decommission all interior surfaces (including floors, walls, ceilings, and counters),

piping, supply lines, waste lines, acid neutralization systems and plumbing in and/or exclusively serving the Premises, and all exhaust or other ductwork in and/or exclusively serving the Premises, in each case which has carried or released or been contacted by any Hazardous Materials or other chemical or biological materials used in the operation of the Premises, and shall otherwise clean the Premises so as to permit the Surrender Plan (defined below) to be issued. At least thirty (30) days prior to the expiration of the Term (or, if applicable, within five (5) business days after any earlier termination of this Lease), Tenant shall deliver to Landlord a reasonably detailed narrative description of the actions proposed (or required by any Legal Requirements) to be taken by Tenant in order to render the Premises (including any Alterations permitted or required by Landlord to remain therein) free of Hazardous Materials and otherwise released for unrestricted use and occupancy including without limitation causing the Premises to be decommissioned in accordance with the regulations of the U.S. Nuclear Regulatory Commission and/or the Massachusetts Department of Public Health (the "**MDPH**") for the control of radiation, and cause the Premises to be released for unrestricted use by the Radiation Control Program of the MDPH (the "**Surrender Plan**"). The Surrender Plan (i) shall be accompanied by a current list of (A) all Required Permits held by or on behalf of any Tenant Party with respect to Hazardous Materials in, on, under, at or about the Premises, and (B) Tenant's Hazardous Materials, and (ii) shall be subject to the review and approval of Landlord's environmental consultant. In connection with review and approval of the Surrender Plan, upon request of Landlord, Tenant shall deliver to Landlord or its consultant such additional non-proprietary information concerning the use of and operations within the Premises as Landlord shall request. On or before the expiration of the Term (or within thirty (30) days after any earlier termination of this Lease, during which period Tenant's use and occupancy of the Premises shall be governed by Section 21.3 below), Tenant shall deliver to Landlord a certification from a third party certified industrial hygienist reasonably acceptable to Landlord certifying that the Premises do not contain any Hazardous Materials and evidence that the approved Surrender Plan shall have been satisfactorily completed by a contractor acceptable to Landlord, and Landlord shall have the right, subject to reimbursement at Tenant's expense as set forth below, to cause Landlord's environmental consultant to inspect the Premises and perform such additional procedures as may be deemed reasonably necessary to confirm that the Premises are, as of the expiration of the Term (or, if applicable, the date which is thirty (30) days after any earlier termination of this Lease), free of Hazardous Materials and otherwise available for unrestricted use and occupancy as aforesaid. Landlord shall have the unrestricted right to deliver the Surrender Plan and any report by Landlord's environmental consultant with respect to the surrender of the Premises to third parties. Such third parties and the Landlord Parties shall be entitled to rely on the Surrender Report. If Tenant shall fail to prepare or submit a Surrender Plan approved by Landlord, or if Tenant shall fail to complete the approved Surrender Plan, or if such Surrender Plan, whether or not approved by Landlord, shall fail to adequately address the use of Hazardous Materials by any of the Tenant Parties in, on, at, under or about the Premises, Landlord shall have the right to take any such actions as Landlord may deem reasonable or appropriate to assure that the Premises and the Property are surrendered in the condition required hereunder, the cost of which actions shall be reimbursed by Tenant as Additional Rent upon demand. Tenant's obligations under this Section 21.1(b) shall survive the expiration or earlier termination of the Term.

(c) No act or thing done by Landlord during the Term shall be deemed an acceptance of a surrender of the Premises, and no agreement to accept such surrender shall be

valid, unless in writing signed by Landlord. Unless otherwise agreed by the parties in writing, no employee of Landlord or of Landlord's agents shall have any power to accept the keys of the Premises prior to the expiration or earlier termination of this Lease. The delivery of keys to any employee of Landlord or of Landlord's agents shall not operate as a termination of this Lease or a surrender of the Premises.

(d) Notwithstanding anything to the contrary contained herein, Tenant shall, at its sole cost and expense, remove from the Premises, prior to the end of the Term, any item installed by or for Tenant and which, pursuant to Legal Requirements, must be removed therefrom before the Premises may be used by a subsequent tenant.

21.2 Abandoned Property. After the expiration or earlier termination hereof, if Tenant fails to remove any property from the Building or the Premises which Tenant is obligated by the terms of this Lease to remove within the applicable Abandonment Notice Period, as hereinafter defined, after written notice from Landlord, such property (the "**Abandoned Property**") shall be conclusively deemed to have been abandoned, and may either be retained by Landlord as its property or sold or otherwise disposed of in such manner as Landlord may see fit. The "**Abandonment Notice Period**" shall be two (2) business days, in the event of the expiration of the Term of the Lease, and shall be ten (10) business days in the event of the earlier termination of the Term of the Lease. If any item of Abandoned Property shall be sold, Tenant hereby agrees that Landlord may receive and retain the proceeds of such sale and apply the same to the expenses of the sale, the cost of moving and storage, any damages to which Landlord may be entitled under Section 20 hereof or pursuant to law, to any arrears of Rent, and to any other amounts due from Tenant to Landlord, with any remainder to be promptly returned to Tenant.

21.3 Holdover. If any of the Tenant Parties holds over (which term shall include, without limitation, the failure of Tenant or any Tenant Party to perform all of its obligations under Section 21.1 above) after the end of the Term, Tenant shall be deemed a tenant-at-sufferance subject to the provisions of this Lease; provided that whether or not Landlord has previously accepted payments of Rent from Tenant, (i) Tenant shall pay Base Rent at the Hold-Over Percentage, as hereinafter defined, of the highest rate of Base Rent payable during the Term, (ii) Tenant shall continue to pay to Landlord all additional rent, and (iii) if such hold over continues for a period of more than thirty (30) days, Tenant shall be liable for all damages, including without limitation lost business and consequential damages, incurred by Landlord as a result of such holding over, Tenant hereby acknowledging that Landlord may need the Premises after the end of the Term for other tenants and that the damages which Landlord may suffer as the result of Tenant's holding over cannot be determined as of the Execution Date. The "Hold Over Percentage' shall be 150%.

21.4 Warranties. Tenant hereby assigns to Landlord, to the extent assignable, any warranties in effect on the last day of the Term with respect to any fixtures and Alterations installed and to remain in the Premises. Tenant shall provide Landlord with copies of any such warranties prior to the expiration of the Term (or, if the Lease is earlier terminated, within five (5) days thereafter).

22. MORTGAGEE RIGHTS

22.1 Subordination. Tenant's rights and interests under this Lease shall be (i) subject and subordinate to the lien of (but not the terms of) any future ground lease, overleases, mortgage, deed of trust, or similar instrument covering the Premises, the Building and/or the Land and to all advances, modifications, renewals, replacements, and extensions thereof (each of the foregoing, a "**Mortgage**"), or (ii) if any Mortgagee elects, prior to the lien of any present or future Mortgage.

Notwithstanding the foregoing, it shall be a condition to Tenant's obligation to subordinate this Lease to any future Mortgage, that Landlord obtains a subordination, non-disturbance and attornment agreement ("**SNDA**") from the holder of such Mortgage (or ground lessor, as the case may be) in the standard form used by such Mortgagee (or ground lessor, as the case may be), with such commercially reasonable changes as may be requested by Tenant and as may be agreed to by Tenant and Mortgagee; provided however, that, in any event, such SNDA shall contain the following provisions: (i) there shall be no modification or delay of Tenant's rights in the event of a delay in the Term Commencement Date, as set forth in Section 3.3 of the Lease, and (ii) while Tenant shall be required to give the Mortgagee written notice of any alleged default of the Landlord at the same time that Tenant gives such notice to Landlord, and the Mortgagee shall have the right to cure any such default within the same time period that Landlord has to cure such default, except that, with respect to defaults of the Landlord which would permit Tenant to terminate this Lease ("**Landlord Termination Defaults**"), Mortgagee shall have such additional period of time (which shall not exceed ninety (90) days after the last day that Landlord has to cure such Landlord Termination Default) as Mortgagee reasonably requires to cure such Landlord Termination Default.

22.2 Notices. Tenant shall give each Mortgagee of which the Tenant is given written notice with the same notices given to Landlord concurrently with the notice to Landlord. Each such Mortgagee shall have the concurrent grace period afforded to Landlord to cure a Landlord default (except that, with respect to any default which is the basis for Tenant to terminate the Lease, each Mortgagee shall have a commercially reasonable additional period of time to cure such default, as set forth in the Mortgagee's SNDA with Tenant), and Mortgagee's curing of any of Landlord's default shall be treated as performance by Landlord.

22.3 Mortgagee Consent. Tenant acknowledges that, other than any consent or approval provided under Sections 3 or 11 hereof, where applicable, any consent or approval hereafter given by Landlord may be subject to the further consent or approval of a Mortgagee; and the failure or refusal of such Mortgagee to give such consent or approval shall, notwithstanding anything to the contrary in this Lease contained, constitute reasonable justification for Landlord's withholding its consent or approval.

22.4 Landlord Subordination of Lien Rights. If Tenant desires to grant a security interest in defined personal property, trade fixtures and/or business equipment of Tenant (collectively "**Collateral**") to a secured party, or to lease any Collateral from a lessor (any such secured party or lessor being referred to herein as "**Secured Party**"), then Landlord shall, upon written request of Tenant, execute such commercially reasonable subordination of Landlord's lien rights to the rights of such Secured Party, provided however, that such Secured Party

acknowledges and agrees that: (i) no auction sale shall be held in the Premises, the Building or the Property, (ii) Secured Party may only enter the Premises during the Term of the Lease, (iii) Secured Party shall give Landlord at least five (5) business days prior to exercising any right to enter the Premises, (iv) Secured Party shall, prior to making any such entry, deliver to Landlord reasonable evidence that it has obtained commercial general liability insurance, naming Landlord and Landlord's managing agent as an additional insured party, with a single limit of not less than $2,000,000.00, (v) Secured Party shall indemnify, defend and hold Landlord and Landlord's managing agent harmless from and against any losses, costs or damage arising from any entry by Secured Party, or its agents, employees, contractors or other invitees, and (vi) Secured Party shall repair any damage to the Premises or the Building caused by the installation or removal of the Collateral.

23. QUIET ENJOYMENT.

Landlord covenants that so long as Tenant keeps and performs each and every covenant, agreement, term, provision and condition herein contained on the part and on behalf of Tenant to be kept and performed, Tenant shall peaceably and quietly hold, occupy and enjoy the Premises during the Term from and against the claims of all persons lawfully claiming by, through or under Landlord subject, nevertheless, to: (i) the covenants, agreements, terms, provisions and conditions of this Lease, (ii) any matters of record as of the Execution Date other than Mortgages, and (iii) any Mortgage to which this Lease is subject and subordinate, as hereinabove set forth.

24. NOTICES.

Any notice, consent, request, bill, demand or statement hereunder (each, a "**Notice**") by either party to the other party shall be in writing and shall be deemed to have been duly given when either delivered by nationally recognized overnight courier (in either case with evidence of delivery or refusal thereof) addressed as follows:

If to Landlord:	King 773 Concord LLC c/o King Street Properties 200 CambridgePark Drive Cambridge, MA 02140 Attention: Stephen D. Lynch Email:
With a copy to:	Goulston & Storrs PC 400 Atlantic Avenue Boston, MA 02110 Attention: King Street
With a copy to:	Capital One, National Association 90 Park Avenue, 4th Floor New York, New York 10016 Attn: Commercial Real Estate Banking

and to:	Morrison & Foerster LLP 250 West 55th Street New York, New York 10019 Attn: Jeffrey Temple, Esq
If to Tenant:	419 Western Avenue Boston, MA 02135 Attn: Paul B. Bolno and Kyle Moran Email address:
With a copy to:	Mintz Levin Cohn Ferris Glovsky and Popeo,P.C. One Financial Center Boston, Massachusetts 02111 Attn: Stuart A. Offner, Esq.

Notwithstanding the foregoing, any notice from Landlord to Tenant regarding ordinary business operations (e.g., exercise of a right of access to the Premises, maintenance activities, invoices, etc.) may also be given by written notice delivered by facsimile to any person at the Premises whom Landlord reasonably believes is authorized to receive such notice on behalf of Tenant without copies as specified above. Either party may at any time change the address or specify an additional address for such Notices by delivering or mailing, as aforesaid, to the other party a notice stating the change and setting forth the changed or additional address, provided such changed or additional address is within the United States. Notices shall be effective upon the date of receipt or refusal thereof.

25. MISCELLANEOUS

25.1 Separability. If any provision of this Lease or portion of such provision or the application thereof to any person or circumstance is for any reason held invalid or unenforceable, the remainder of this Lease (or the remainder of such provision) and the application thereof to other persons or circumstances shall not be affected thereby.

25.2 Captions. The captions are inserted only as a matter of convenience and for reference, and in no way define, limit or describe the scope of this Lease nor the intent of any provisions thereof.

25.3 Broker. Tenant and Landlord each warrants and represents that it has dealt with no broker in connection with the consummation of this Lease other than Colliers International and NAI Hunneman (collectively, "**Broker**"). Tenant and Landlord each agrees to defend, indemnify and save the other harmless from and against any Claims arising in breach of the representation and warranty set forth in the immediately preceding sentence. Landlord shall be solely responsible for the payment of any brokerage commissions to Broker.

25.4 Entire Agreement. This Lease, Lease Summary Sheet and all Exhibits attached hereto contain the entire and only agreement between the parties and any and all statements and representations, written and oral, including previous correspondence and agreements between the

parties hereto, are merged herein. Tenant acknowledges that all representations and statements upon which it relied in executing this Lease are contained herein and that Tenant in no way relied upon any other statements or representations, written or oral. This Lease may not be modified orally or in any manner other than by written agreement signed by the parties hereto.

25.5 Governing Law. This Lease is made pursuant to, and shall be governed by, and construed in accordance with, the laws of the Commonwealth of Massachusetts and any applicable local municipal rules, regulations, by-laws, ordinances and the like.

25.6 Representation of Authority. By his or her execution hereof, each of the signatories on behalf of the respective parties hereby warrants and represents to the other that he or she is duly authorized to execute this Lease on behalf of such party.

25.7 Expenses Incurred by Landlord Upon Tenant Requests. Tenant shall, upon demand, reimburse Landlord for all reasonable expenses, including, without limitation, reasonable legal fees, incurred by Landlord in connection with all requests by Tenant for consents, approvals or execution of collateral documentation related to this Lease, including, without limitation, costs incurred by Landlord in the review and approval of Tenant's plans and specifications in connection with proposed Alterations to be made by Tenant to the Premises or in connection with requests by Tenant for Landlord's consent to make a Transfer; provided however, that: (i) the maximum amount payable by Tenant on account of fees incurred by Landlord with respect to any request by Tenant for Landlord's consent to a proposed Transfer shall be $1,500, except: (w) where the Transfer is a sub-sublease of any tier, and (x) where, at Tenant's request, the parties enter into a mutually acceptable amendment to the Lease in connection with such proposed Transfer, and (ii) Tenant shall not be required to pay for the cost of Landlord's review and approval of Tenant's plans and specifications in connection with proposed Alterations, except in those instances where Landlord, in its reasonable business judgment, is required to engage a third-party engineer (e.g., structural or MEP) to review such plans and specifications. Such costs shall be deemed to be additional rent under this Lease.

25.8 Survival. Without limiting any other obligation of either party which may survive the expiration or prior termination of the Term, all obligations on the part of either party to indemnify, defend, or hold the other party harmless, as set forth in this Lease shall survive the expiration or prior termination of the Term.

25.9 Limitation of Liability.

(a) Limitations on Landlord's Liability. Tenant shall neither assert nor seek to enforce any claim against Landlord or any of the Landlord Parties, or the assets of any of the Landlord Parties, for breach of this Lease or otherwise, other than against Landlord's interest in the Property and in the uncollected rents, issues and profits thereof, and Tenant agrees to look solely to such interest for the satisfaction of any liability of Landlord under this Lease. This Section 25.9 shall not limit any right that Tenant might otherwise have to obtain injunctive relief against Landlord. Landlord and Tenant specifically agree that in no event shall any officer, director, trustee, employee or representative of Landlord or of any of the other Landlord Parties ever be personally liable for any obligation under this Lease, nor shall Landlord or any of the other Landlord Parties be liable for consequential, indirect or incidental damages or for lost income or lost profits whatsoever in connection with this Lease.

(b) Limitations on Tenant's Liability. Landlord and Tenant specifically agree that in no event shall any officer, director, trustee, employee or representative of Tenant ("Tenant Limited Parties") ever be personally liable for any obligation under this Lease, nor shall Tenant or any of the other Tenant Limited Parties be liable for consequential, indirect or incidental damages or for lost income or lost profits whatsoever in connection with this Lease, provided however, that nothing in this Section 25.9(b) shall affect or limit any liability or obligation which Tenant has to Landlord pursuant to either Section 21.1 (Hazardous Materials) or 21.3 (Hold Over).

25.10 Binding Effect. The covenants, agreements, terms, provisions and conditions of this Lease shall bind and benefit the successors and assigns of the parties hereto with the same effect as if mentioned in each instance where a party hereto is named or referred to, except that no violation of the provisions of Section 13 hereof shall operate to vest any rights in any successor or assignee of Tenant.

25.11 Landlord Obligations upon Transfer. Upon any sale, transfer or other disposition of the Property, Landlord shall be entirely freed and relieved from the performance and observance thereafter of all covenants and obligations hereunder on the part of Landlord to be performed and observed, it being understood and agreed in such event (and it shall be deemed and construed as a covenant running with the land) that the person succeeding to Landlord's ownership of said reversionary interest shall thereupon and thereafter assume, and perform and observe, any and all of such covenants and obligations of Landlord, except as otherwise agreed in writing.

25.12 No Grant of Interest. Tenant shall not grant any interest whatsoever in any fixtures within the Premises or any item paid in whole or in part by Landlord's Contribution or by Landlord.

25.13 Financial Information. Tenant shall deliver to Landlord, within thirty (30) days after Landlord's reasonable request, Tenant's most recently completed balance sheet and related statements of income, shareholder's equity and cash flows statements (audited if available) certified by an officer of Tenant as being true and correct in all material respects (collectively "**Tenant's Financial Information**"). Landlord shall not have the right to request that Tenant deliver Tenant's Financial Information to Landlord more than one time in any consecutive twelve (12) month period, except that: (i) during any period of that an uncured Event of Default by Tenant exists, Tenant shall provide Tenant's Financial Information to Landlord upon written request, and (ii) if Landlord requests that Tenant provide Tenant's Financial Information, Landlord shall have the right, in a connection with any proposed sale or refinancing of the Property, to require Tenant to provide updated Tenant's Financial Information to Landlord during twelve (12) month period following such request. Any such financial information may be relied upon by any actual or potential lessor, purchaser, or mortgagee of the Property or any portion thereof. Notwithstanding the foregoing, the provisions of this Section 25.13 shall have no force or effect so long as Tenant is a publicly traded company. Landlord shall not disclose Tenant's Financial Information to any third party other than: (i) to Landlord's lenders, investors,

purchasers, prospective lenders, prospective investors, and prospective purchasers, who, in all cases, are advised of the obligation to keep Tenant's Financial Information Confidential in accordance with this Section 25.13, (ii) to Landlord's partners, members, agents, consultants, advisors, attorneys and accountants, who, in all cases, are advised of the obligation to keep Tenant's Financial Information Confidential in accordance with this Section 25.13, (iii) as required by Legal Requirements, order of governmental agency, court order, and (iv) in connection with any litigation between the parties.

25.14 OFAC Certificate. Executive Order No. 13224 on Terrorist Financing, effective September 24, 2001 (the "**Executive Order**), and the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001 (Public Law 10756, the "**Patriot Act**") prohibit certain property transfers.

(a) Tenant Obligations. Tenant hereby represents and warrants to Landlord (which representations and warranties shall be deemed to be continuing and re-made at all times during the Term) that Tenant is not in violation of the Executive Order, and that Tenant is not listed on the United States Department of the Treasury Office of Foreign Assets Control ("**OFAC**") list of "Specially Designated Nationals and Blocked Persons" as modified from time to time. The most current list of "Specially Designated Nationals and Blocked Persons" can be found at http://www.treas.gov/offices/eotffc/ofacisdn/index.html. Tenant shall from time to time, within ten days after request by Landlord, deliver to Landlord any certification or other evidence requested from time to time by Landlord in its reasonable discretion, confirming Tenant's compliance with these provisions. No assignment or subletting, other than an assignment to an Affiliated Entity or Successor, shall be effective unless and until the assignee or subtenant thereunder delivers to Landlord written confirmation of such party's compliance with the provisions of this subsection, in form and content satisfactory to Landlord.

(b) Landlord Obligations. Landlord hereby represents and warrants to Tenant (which representations and warranties shall be deemed to be continuing and re-made at all times during the Term) that Landlord is not in violation of the Executive Order, and that Landlord is not listed on the OFAC list of "Specially Designated Nationals and Blocked Persons" as modified from time to time. Landlord shall from time to time, within ten days after request by Tenant, deliver to Tenant any certification or other evidence requested from time to time by Tenant in its reasonable discretion, confirming Landlord's compliance with these provisions.

25.15 Confidential Information. Either Landlord or Tenant, or their respective representatives, may disclose ("**Disclosing Party**") to the other party or its representatives ("**Receiving Party**"), orally or in writing, or Landlord or Tenant (or their respective representatives) may otherwise obtain, through observation or otherwise, Confidential Information of Disclosing Party. The Receiving Party must, and must cause its representatives to: (i) protect all such Confidential Information from disclosure except as expressly permitted hereunder; (ii) only disclose such Confidential Information to those employees, independent contractors, agents, advisors, directors and officers of the Receiving Party to the extent necessary or required for performance of obligations hereunder, and Landlord shall have the right to disclose such Confidential Information to its actual and prospective lenders, investors and purchasers, and Tenant shall have the right to disclose such Confidential Information to any prospective party to a Transfer, provided that, prior to any such disclosure, the Receiving Party has secured written commitments from the aforementioned persons or entities evidencing their agreement to comply with the confidentiality requirements of this Lease.

Confidential Information shall mean any and all information and materials disclosed by or on behalf of the Disclosing Party, any affiliate of the Disclosing Party or any of their respective representatives to the Disclosing Party or any of the Disclosing Party's representatives to the extent that the same is marked or otherwise identified as confidential or proprietary information, or otherwise contained on WaVe Life Sciences letterhead. Additionally, Confidential Information shall include this Lease, and all documents and/or correspondence issued and/or delivered in connection with this Lease. Without limiting the foregoing (1) each party's trade secrets, existing and future products or service offerings, designs, business plans, business opportunities, finances, research, development, know-how, and other business, operational or technical information shall be deemed the Confidential Information of that party to the extent that such information satisfies the conditions the immediately preceding sentence. As between Landlord and Tenant, except as provided otherwise in this Lease, each party's respective Confidential Information will remain such party's sole and exclusive property. To the extent third parties disclose to Landlord or Tenant the Confidential Information of the other party or its affiliates, the obligations set forth in this Section shall apply to the same extent as if the other party had disclosed such information directly to the Receiving Party.

The obligations set forth in this Section shall not apply to any portion of Confidential Information which is or later becomes generally available to the public by use, publication or the like, through no act or omission of the Receiving Party. In the event a Receiving Party becomes legally compelled to disclose any Confidential Information of the other party, it shall promptly provide the Disclosing Party with notice thereof prior to any disclosure, shall use its best efforts to minimize the disclosure of any Confidential Information, and shall cooperate with the Disclosing Party, in such manner as the Disclosing Party shall reasonably request, provided that the Receiving Party shall, in making such efforts and cooperating with the Disclosing Party, be entitled to reimbursement from the Disclosing Party within ten (10) days following its written demand, for any out-of-pocket costs incurred by the Receiving Party in connection with such efforts and cooperation. The Receiving Party shall be permitted to disclose Confidential Information when legally compelled to do so, or in connection with any litigation or alternative dispute resolution proceedings between Landlord and Tenant, unless the Disclosing Party has obtained a protective order or other appropriate remedy prohibiting such disclosure prior to the time that the Receiving Party is compelled, or permitted to do so (i.e., in connection with litigation or alternative dispute resolution, as aforesaid). The obligations under this Section shall survive the expiration of the Term or any earlier termination of this Agreement.

25.16 Notice of Lease. Neither party shall record this Lease, but each of the parties hereto agrees, at Tenant's option, to join in the execution, in recordable form and substantially similar to the form attached hereto as Exhibit 10, of a statutory notice of lease and/or written declaration in which shall be stated the Term Commencement Date with respect to the Term, the length of the Extension Term and the Expiration Date, which notice of lease may be recorded by Tenant with the Middlesex South Registry of Deeds and/or filed with the Registry District of the Land Court, as appropriate.

25.17 Publicity. Except for the purposes of performance hereunder, without Tenant's prior written consent, which may be withheld at Tenant's sole discretion, Landlord and its representatives shall not use (including without limitation use in any publicity, advertising, media release, public announcement or other public disclosure) (i) any name, acronym, symbol or other designation by which Tenant or its affiliates or any of their respective human therapeutics, products or other materials is known or (ii) the names of any agent or employee of Tenant or its affiliates (each a "Prohibited Use). Landlord shall notify Tenant in each event of a Prohibited Use promptly after Landlord becomes aware of the same, and, at Landlord's sole cost and expense, without limiting Tenant's rights and remedies hereunder, Landlord shall, and shall cause its Representatives, to immediately cease and desist each such Prohibited Use and take such other actions as reasonably requested by Tenant.

[SIGNATURES ON FOLLOWING PAGE]

IN WITNESS WHEREOF the parties hereto have executed this Lease as a sealed instrument as of the Execution Date.

LANDLORD

KING 733 CONCORD LLC,
By: KING STREET PROPERTIES INVESTMENTS, LLC, its Manager

By: /s/ Thomas Ragno
Name: Thomas Ragno
Title: A Manager

TENANT

WAVE LIFE SCIFNCES USA, Inc.,
a Delaware Corporation

By: /s/ Kyle Moran
Name: Kyle Moran
Title: Treasurer

EXHIBIT 1A

LEASE PLAN OF FIRST FLOOR PREMISES—FIRST FLOOR

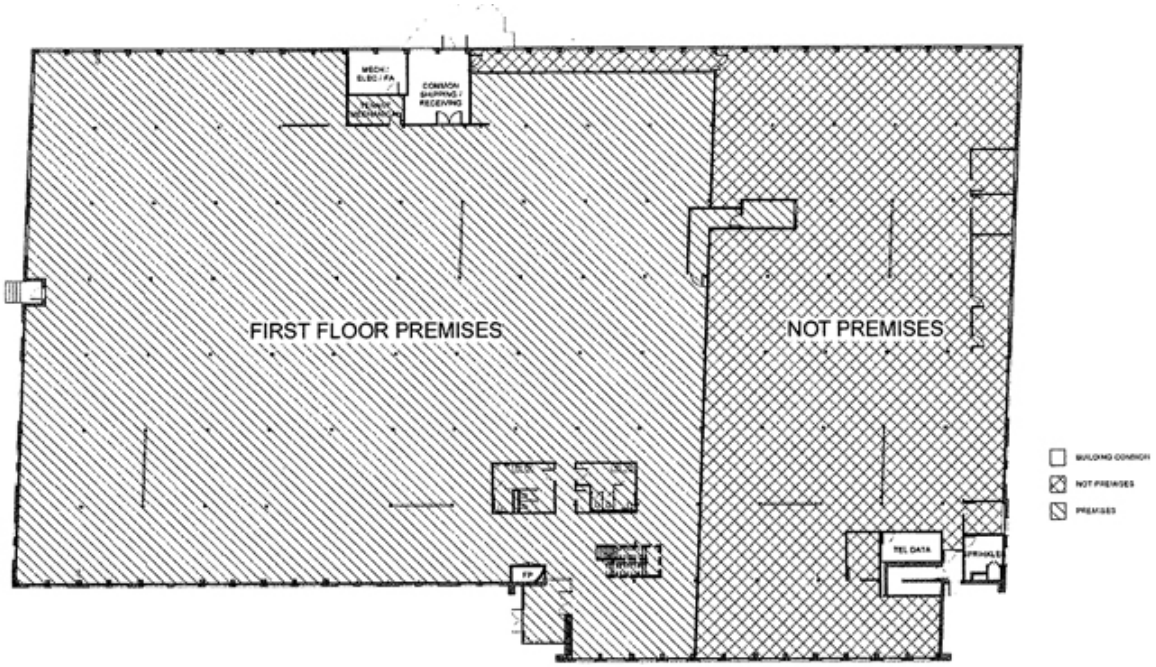

EXHIBIT 1B

LEASE PLAN OF MEZZANINE PREMISES—MEZZANINE

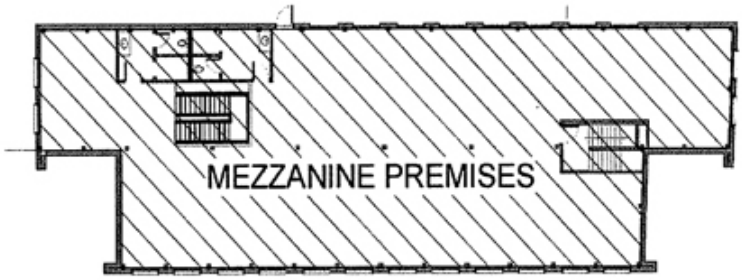

EXHIBIT 1C

ROOFTOP PREMISES EXHIBIT 1B—ROOF

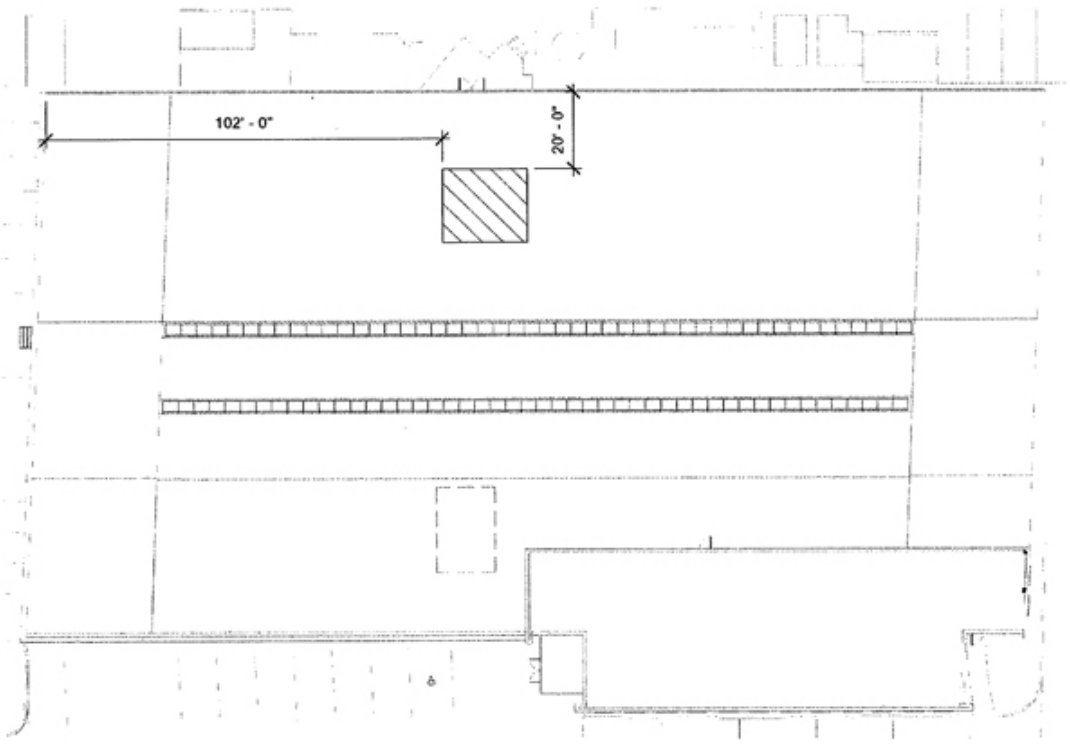

EXHIBIT 2

LEGAL DESCRIPTION

The land at 733 Concord Street, Cambridge, Middlesex County, Massachusetts, consisting of two parcels of land:

PARCEL l:

Being shown as Lot 7 on Land Court Plan No. 7191U, dated December 3, 1952, a copy of which is filed with the Middlesex South District Registry of the Land Court with Certificate of Title No. 77364.

PARCEL 2:

Being shown as Lot 25 and Lot 29 on Land Court Plan No. 7191-3, dated July 22, 1960, a copy of which is filed with the Middlesex South District Registry of the Land Court with Certificate of Title No. 102747.

TOGETHER with the benefit of rights set forth in a Deed from Jean D. Balkin, dated January 31, 1949, filed with said Registry District as Document No. 227978.

TOGETHER with the right to use the whole of Smith Place shown on said plan in common with others entitled thereto, as to Lots 7 and 29.

TOGETHER with the right to use Lots 10, 11 and 12 shown on a plan filed in Registration Book 516, Page 481, in common with others having like rights therein, said right as appurtenant to Lot 25, being set forth in a Deed from Julia T. Corkery, dated December 28, 1954, filed with said Registry District as Document No. 289672, as to Lot 25.

TOGETHER with the benefit of the right to use the “Way” shown as Lot 26 on a plan filed in Registration Book 643, Page 197, as set forth in a Deed from Haskell Cohn, et als, dated October 10, 1960, filed with said Registry District as Document No. 360534, as to Lot 25.

Being the same premises conveyed to King 733 Concord LLC by Quitclaim Deed dated May 11, 2011, filed with said Registry District as Document No. 1566113 and noted on Certificate of Title No. 248720, Book 1399, Page 99.

WORK LETTER

This Exhibit is attached to and made a part of the Lease (the "**Lease**") by and between **KING 773 CONCORD, LLC**, a Delaware limited liability company ("**Landlord**"), and **WAVE LIFE SCIENCES USA, INC**., a Delaware corporation ("**Tenant**"), for space located at 733 Concord Avenue, Cambridge, Massachusetts. Capitalized terms used but not defined herein shall have the meanings given in the Lease.

1. Definitions. This Work Letter shall set forth the obligations of Landlord and Tenant with respect to the improvements to be performed in the Premises for Tenant's use. For the purposes of this Lease, "**Landlord Work**" consists of: (i) the Base Building Work described on Exhibit 3-1, (ii) the Tenant Improvement Work, described on Exhibit 3-2, (iii) the equipment list ("**Equipment List**") attached hereto as Exhibit 3-3, and (iv) the responsibilities of Landlord as set forth in the Landlord/Tenant Responsibility Matrix attached hereto as Exhibit 3-4. In the event of any conflict between Exhibit 3-4 and either Exhibit 3-2 or Exhibit 3-3, Exhibit 3-4 shall control. Landlord shall select the contractor ("**Contractor**") who will perform the Landlord Work.

2. Cost of Landlord Work. The Landlord Work shall be performed at Landlord's sole cost and expense, except that Tenant shall be responsible for any costs ("**Tenant Costs**") in performing the Landlord Work to the extent arising from: (i) Tenant Delays, as hereinafter defined, (ii) with respect to any Changes to the Tenant Improvement Work, Tenant shall pay for the cost of such changes in accordance with Section 4 below, and (iii) with respect to any increases in the cost of Landlord's Work arising from Claims by the Contractor, Tenant shall pay for the cost of such Claims as set forth in Section 5 below. "**Billing**" shall be defined as any invoice from Landlord setting forth, reasonable detail, the amount due from Tenant, and shall include invoices from vendors and service providers, and applications for payment from the Contractor. Billing may not be submitted to Tenant more than one time per calendar month. The amounts payable by Tenant hereunder constitute Rent payable pursuant to the Lease, and the failure to timely pay same constitutes an event of default under the Lease.

3. Tenant Responses. Tenant shall respond, in writing, to any requests from Landlord, Landlord's contractor or Landlord's architect for information, consents, or authorizations to proceed, within two (2) business days of Tenant's receipt of such request. Any failure by Tenant to respond within such time period may be the basis of a Tenant Delay.

4. Changes. If Tenant shall request any change, addition or alteration in the Tenant Improvement Work ("**Changes**"), Landlord shall have such revisions to the drawings prepared. Tenant shall have no right to request Changes in the Base Building Work. Promptly upon completion of the revisions, Landlord shall notify Tenant in writing of the increased cost, if any, which will be chargeable to Tenant by reason of such change, addition or deletion. Tenant, within two (2) Business Days, shall notify Landlord in writing whether it desires to proceed with such Change. In the absence of such written authorization, Landlord shall have the option to continue work on the Premises disregarding the requested Change. Tenant shall reimburse Landlord for the cost of the Landlord associated with such Changes within thirty (30) days of upon Billing, as such Change work is being performed.

5. Claims. To the extent that any claims ("**Claims**") by the Contractor increase the cost of the Landlord Work, Tenant shall pay for such excess within thirty (30) days of Billing. Claims shall include any amounts properly due to the Contractor under Landlord's contract ("**Construction Contract**') with the Contractor based upon the claims of the Contractor under the Contract, provided however, that the Claims shall not include any amounts arising from the default or negligence of Landlord, or Landlord's agents or employees, under the Construction Contract.

6. Performance of Landlord's Work. Landlord shall cause the Tenant Improvement Work to be constructed substantially in accordance with **Exhibits 3-1, 3-2, and 3-3**.

7. Miscellaneous

(a) **Tenant's Authorized Representative**. Tenant designates Kyle Moran, [Address] – 617-257-5457 ("**Tenant's Representative**) as the only person authorized to act for Tenant pursuant to this Work Letter. Landlord shall not be obligated to respond to or act upon any request, approval, inquiry or other communication ("**Communication**") from or on behalf of Tenant in connection with this Work Letter unless such Communication is in writing from Tenant's Representative. Tenant may change either Tenant's Representative at any time upon not less than five (5) business days advance written notice to Landlord.

(b) **Landlord's Authorized Representative**. Landlord designates Stephen D. Lynch, 200 Cambridge Park Drive, Cambridge, MA 02140, [Address] – 617-990-5502 ("**Landlord's Representative**) as the only person authorized to act for Landlord pursuant to this Work Letter. Tenant shall not be obligated to respond to or act upon any request, approval, inquiry or other Communication from or on behalf of Landlord in connection with this Work Letter unless such Communication is in writing from Landlord's Representative. Landlord may change either Landlord's Representative at any time upon not less than five (5) business days advance written notice to Tenant.

(c) Tenant shall have the right, during the performance of the Landlord Work, to have Tenant's Representative participate in weekly construction meetings with Landlord and the Contractor as to the status of the performance of Tenant Improvement Work.

(d) Tenant shall have access to the Premises prior to the Term Commencement Date in accordance with the provisions of Section 3.04 of the Lease.

8. Disputes.

Any disputes relating to provisions or obligations in this Lease in connection with Tenant Landlord Work or this **Exhibit 3** shall be submitted to arbitration in accordance with the provisions of applicable state law, as from time to time amended. Arbitration proceedings, including the selection of an arbitrator, shall be conducted pursuant to the rules, regulations and

procedures from time to time in effect as promulgated by the American Arbitration Association. Notwithstanding the foregoing, the parties hereby agree that the arbitrator for any disputes relating to Landlord Work shall be a construction consultant experienced in the construction of office/laboratory buildings in the cities of Boston and Cambridge, as mutually agreed upon by the parties, or, if not then designated by the parties, within ten (10) days after either party makes a request for arbitration hereunder, or (if the parties do not mutually agree upon such arbitrator) as designated by the Boston office of the American Arbitration Association upon request by either party. Prior written notice of application by either party for arbitration shall be given to the other at least ten (10) days before submission of the application to the said Association's office in Boston, Massachusetts. The arbitrator shall hear the parties and their evidence. The decision of the arbitrator shall be binding and conclusive, and judgment upon the award or decision of the arbitrator may be entered in the appropriate court of law; and the parties consent to the jurisdiction of such court and further agree that any process or notice of motion or other application to the Court or a Judge thereof may be served outside the Commonwealth of Massachusetts by registered mail or by personal service, provided a reasonable time for appearance is allowed. The costs and expenses of each arbitration hereunder and their apportionment between the parties shall be determined by the arbitrator in his award or decision. Except where a specified period is referenced in this Lease, no arbitrable dispute shall be deemed to have arisen under this Lease prior to the expiration of the period of twenty (20) days after the date of the giving of written notice by the party asserting the existence of the dispute together with a description thereof sufficient for an understanding thereof. In connection with the foregoing, it is expressly understood and agreed that the parties shall continue to perform their respective obligations under the Lease during the pendency of any such arbitration proceeding hereunder (with any adjustments or reallocations to be made on account of such continued performance as determined by the arbitrator in his or her award).

This Exhibit shall not be deemed applicable to any additional space added to the Premises at any time or from time to time, whether by any options under the Lease or otherwise, or to any portion of the original Premises or any additions to the Premises in the event of a renewal or extension of the original Term of the Lease, whether by any options under the Lease or otherwise, unless expressly so provided in the Lease or any amendment or supplement to the Lease.

EXHIBIT 3-1

BASE BUILDING WORK

Landlord shall complete the renovations to the Building as shown within the 733 CONCORD AVE PRICING SET – ASI 01" dated 12/11/14 as prepared by DiMella Shaffer, including the following additional items:

- One (1) set of new bathrooms as shown on Exhibit 3-2, and two (2) sets of renovated existing bathrooms located near the main entry lobby to the Premises and on the mezzanine level of the Premises respectively.
- One (1) new ornamental metal stairway near the main entry lobby to the Premises.
- Striping of the parking areas serving the Premises as shown on Exhibit 4.

EXHIBIT 3-2

TENANT IMPROVEMENT WORK

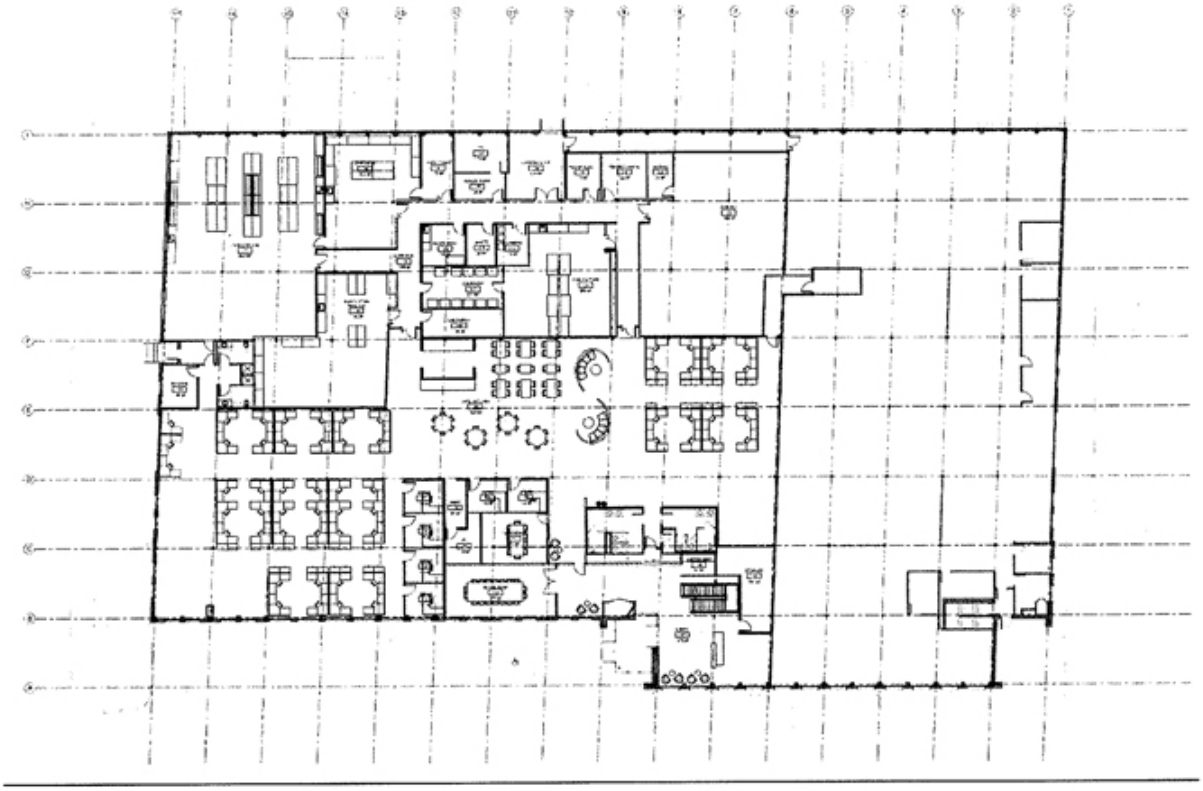

EXHIBIT 3-3

EQUIPMENT LIST

WAVE_EQ_by_LabJRR

NEW ROOM NAME	DEPT	ELECTRICAL STD	ELECTRICAL EMER	MECHANICAL HEAT	MECHANICAL EXHST	PLUMBING AIR	PLUMBING GAS	PLUMBING VAC	PLUMBING DRAIN	PLUMBING H2O	PLUMBING CO2	PLUMBING ROD	REMARKS NEW-RELOC-NIC-ETC
3/18/2015													
Lab Utilities SUMMARY													
Main Chemistry Lab													
Lab Benches		X			X	X		X					CLG. UTILITY PNLS & SPOT EXHAUSTS FM ARTICULATING ARM
Chemical Hoods x 8-12		X			X	X	X	X					GAS, VAC & AIR IS REQ'D
Lab Sinks									X	X		X	RODI BY POU POLISHER
EQ AREA		X	X										
Synthesis Lab													
Lab Benches		X			X	X		X					CLG. UTILITY PNLS & SPOT EXHAUSTS FM ARTICULATING ARM
Chemical Hood 1 or 2		X			X								GAS, VAC & AIR IS REQ'D
Lab Sinks									X	X		X	RODI BY POU POLISHER
EQ AREA		X	X										
Purification Lab													
Lab Benches		X			X	X		X					CLG. UTILITY PNLS
Chemical Hood shared		X			X								GAS, VAC & AIR IS REQ'D
Lab Sinks									X	X		X	RODI BY POU POLISHER
EQ AREA		X	X										
Main Biology Lab													
Lab Benches		X				X		X					CLG. UTILITY PNLS
Chemical Hood		X			X								GAS, VAC & AIR IS REQ'D
Lab Sinks									X	X		X	RODI BY POU POLISHER
EQ AREA		X	X										
Cell Culture													
Incubators		X	X				X	X			X		CO2 from tank FARM
BSC's		X						X					GAS, VAC & AIR IS REQ'D
Sink & Bench Area		X							X	X		X	
Equipment Room													
Refrigerators		X	X										plugmold for data monitoring and ELEC IN WIREMOLD along walls
Freezers		X	X										plugmold for data monitoring and ELEC IN WIREMOLD along walls
Glasswash													
Sink & Bench Area		X			X				X	X		X	services for AC, GW, ICE and ovens
Gas Room													
LN2 tanks		X											manifolds for distribution
Hazmat													
Sink & Bench Area??		X							X	X		X	exhaust for dispensing. MAY BE CLASS I DIV 2

NEW ROOM NO	NEW ROOM NAME	DEPT	NO	EQUIPMENT	QTY 3/15/2015	QTY 2017	MFR	CUT AVAIL	EXT. SIZE W/Fr	EXT. SIZE D/Fr	EXT. SIZE H/Fr	MOUNTING	HEIGHT	ELECTRICAL VOLTS	ELECTRICAL AMPS	ELECTRICAL PHASE	ELECTRICAL EMER	MECHANICAL BTU/H	MECHANICAL CFM	PLUMBING DI AIR	PLUMBING VAC	PLUMBING N2	PLUMBING Ary	Liquid CO2	Liquid N2	Liquid H2O	DRAIN	LSE	REMARKS NEW-RELOC-NIC-ETC	Plug Typ	Model No. NEMA #	Serial No.
	WAVE CHEMISTRY Lab																														
	Organic Chemists				8	12																									
	Chemistry Lab	ABS	CL-1	8' Chemical Fume Hood - VF	8	12	TBD		72	38	104	Floor		120	20			1200	X	X	X	X										
	Chemistry Lab	ABS	CL-2	8' Chemical Fume Hood - VF	1	2	TBD		98	38	104	Floor		120	20			1200	X	X	X	X										
	Chemistry Lab	ABS	CL-3	Incubator Shaker	1	2			32	26	33	Bench		120	20																	
	Chemistry Lab	ABS	CL-4	Furnace	3	4			31	30	33	Furniture		120	20																	
	Chemistry Lab	ABS	CL-5	Lyophilizer	1	2			33	35	70	Bench		120	20		X	100			X							X		Needs local Exhaust			
	Chemistry Lab	ABS	CL-6	Speedvac	2	4			16	30	11	Bench		120	20		X				X							X		Needs Exhaust. Close with Lyophilizer			
	Chemistry Lab	ABS	CL-7	Glovebox	2	2	Qiss		31	30	33	Furniture		120	20																	
	Chemistry Lab	ABS	CL-8	Slow 200 Benchtop Centrifuge S-200	1	1	IE		16	30	24	Bench		120	20																	
	Chemistry Lab	ABS	CL-9	Safety Cabinet Chemical Storage	3	8			43	19	44	Floor						100												Needs Exhaust connection for vent			
	Chemistry Lab	ABS	CL-10	Chemistry Weighing Chemicals and	1	1	VWR		67	33	33	Bench																				
	Chemistry Lab	ABS	CL-11	Refrigerator 4 Degree - Chem	1	1			64	33	80	Floor		120	20		X															
	Chemistry Lab	ABS	CL-12	Concentrator Centrifuge	1	1			33	33	58	Floor		120	20		X															
	Chemistry Lab	ABS	CL-13	Oven	2	2			58	30	58	Bench		120	20			100														
	Chemistry Lab	ABS	CL-14	FUTURE																												
	Chemistry Lab	ABS	CL-15	FUTURE																												
				PTE Deionized Benchtop - 8	8	12																										
				Small Equipment Benchtop - 8	3	8																										

NEW ROOM NO	NEW ROOM NAME	DEPT	NO.	EQUIPMENT	QTY 5/13/2015	QTY ### 2017	MFR.	CUT AVAIL	EXT. SIZE W(in)	D(in)	H(in)	MOUNTING	WEIGHT	ELECTRICAL VOLTS	AMPS	PHASE	EMER	MECHANICAL BTU	CFM	PLUMBING AIR	VAC	N2	Arg	Liquid CO2	N2	H2O	DRAIN	USE	REMARKS NEW-RELOC-NIC-ETC	Plug Typ NEMA #	Model No.	Serial No.
	WAVE SYNTHESIS Lab																														
	Oligo Chemistry				8	+3																									
	Synthesis Lab	R&B	SYN-1	S Chemical Fume Hood - LT	-	1	TBD		96	36	+24	Floor	400	+20	20			+800	X	X	X	X									
	Synthesis Lab	R&B	SYN-2	Sink & Box	2	1	TBD					Floor		+20	20							X						Acces - Cuticifier			
	Synthesis Lab	R&B	SYN-3	Open Exhausts / Canopies (ARTIC	4	8	TBD					Ceiling																			
	Synthesis Lab	R&B	SYN-4	DNA / RNA Synthesizer 395	-	1	ABI		90	30	37	bench		+20	20		X	+20				X				X		Needs Open Exhaust or Canopy			
	Synthesis Lab	R&B	SYN-5	Hermetic *2	-	1	A		90	30	30	bench		+20	20		X	+20				X				X		Needs Open Exhaust or Canopy			
	Synthesis Lab	R&B	SYN-6	Akta *10 Chromatog	2	2	Akta		84	30	60	bench		+20	20			+20				X						Needs Open Exhaust or Canopy, Accessible Keys Requir			
	Synthesis Lab	R&B	SYN-7	AKTA *2 Chromatog	0	1	Akta		84	30	60	bench		+20	20			+20				X						Needs Open Exhaust or Canopy			
	Synthesis Lab	R&B	SYN-8	Hermetic *30 084	0	1	A		90	30	30	bench		+20	20			+20				X						Needs Open Exhaust or Canopy			
	Synthesis Lab	R&B	SYN-9	Hydrogenator 4 Cassette Cl	-	1			84	30	60	Floor		+20	20		X														
	Synthesis Lab	R&B	SYN-10	Dehumidifier	-	1			36	30	36	Floor		+20	20																
	Synthesis Lab	R&B	SYN-11	F_F_R&B																											
	Synthesis Lab	R&B	SYN-12	F_F_R&B																											
	Synthesis Lab	R&B	SYN-13	F_F_R&B																											
	Synthesis Lab	R&B	SYN-14	F_F_R&B																											
	Synthesis Lab	R&B	SYN-15	F_F_R&B																											
				FTE Dedicated Benching - 8																											
				Small Equipment Benching - 8																											

NEW ROOM NO	NEW ROOM NAME	DEPT	NO	EQUIPMENT 3/15/2015	QTY 2016	QTY 2017	MFR	OUT AVAIL	EXT. SIZE W(in)	D(in)	H(in)	MOUNTING	WEIGHT	ELECTRICAL VOLTS	AMPS	PHASE	[illegible]	MECHANICAL BTU	CFM E	PLUMBING AIR	VAC	N2	Arg	CO2	Liquid N2	H2O	Drain	% USE	REMARKS NEW-REL-OC-NIC-ETC	Plug Type NEMA #	Model No.	Serial No.
	WAVE PURIFICATION Lab																															
	Oligo Chem lab				8	10																										
	Analytical Chem lab				4	7																										
	Purification Lab	REB	PA-1	UPLC - SQD 2/Prep	1	1	Waters		72	30	33	Bench		208	15		X		100						X				Requires Exhaust for Gas. Space underneath bench for vac pump. Nitrogen Gas highest grade plumbing. Specialized Electrical Outlet (x).			
	Purification Lab	REB	PA-2	Analytical HPLC	3	4	Multi		46	30	33	Bench		120	20																	
	Purification Lab	REB	PA-3	UPLC/TOF	1	1	Agilent		72	30	45	Bench		208	15		X												Needs Exhaust. Spec Elec Outlet. Space under bench for vac pump.			
	Purification Lab	REB	PA-4	Nitrogen Generator	1	1	Peak		30	38	36	Floor		230	15		X												Needs to be next to UPLC/TOF			
	Purification Lab	REB	PA-5	UV Spectrophotometer	1	1	Agilent		66	30	15	Bench		120	20						X	X				X	X					
	Purification Lab	REB	PA-6	Prep HPLC purification System	2	3	Multi		30	24	33	Bench		120	20																	
	Purification Lab	REB	PA-7	Millipore System	0	1	Millipore					Wall & Bench		120	20											X	X					
	Purification Lab	REB	PA-8	Glassware Shelving																												
	Purification Lab	REB	PA-9	FUTURE																												
	Purification Lab	REB	PA-10	FUTURE																												
				FHS Dedicated Benching - 8																												
				Small Equipment Benching - 8																												

NEW ROOM NO	NEW ROOM NAME	DEPT	NO	EQUIPMENT	QTY 5/18/2015	QTY 2017	MFR	CUT AVAIL	EXT. SIZE Width	EXT. SIZE Depth	EXT. SIZE Height	MOUNTING	WEIGHT	ELECTRICAL VOLT	ELECTRICAL AMP	ELECTRICAL PHASE	MECHANICAL EMER	MECHANICAL BTU'S	MECHANICAL CFM EX	PLUMBING AIR	PLUMBING GAS	PLUMBING VAC	PLUMBING RAI	PLUMBING H2O	PLUMBING CO2	% USE	REMARKS NEW-RELOC-NIC-ETC	Plug Typ NEMA #	Model No.	Serial No.
	WAVE BIOLOGY Lab																													
	Biology				5	10																								
	Biology Lab	RES	BL-1	6' Chemical Fume Hood - LF	*	1	TBD		72	38	104	Floor	400	208	20			2000	X		X				X					
	Biology Lab	RES	BL-2	DNA incubator	*	1	UVP		28	26	31	Bench		120	20		X													
	Biology Lab	RES	BL-3	SpectraMax	*	1	Molecular Dev.		46	33	23	Bench		120	20												Budget more space on right for robotic feeder			
	Biology Lab	RES	BL-4	Spectramax Robotic Feeder	0	1	Molecular Dev.		23	35	22	Bench		120	20												Shared w/ Spectramax			
	Biology Lab	RES	BL-5	LightCycler 480 II	*	1	Roche		33	35	20	Bench		240	20	*											Budget more space on right for robotic arm.			
	Biology Lab	RES	BL-6	LightCycler Robotic Arm	0	1	Roche		23	33	20	Bench															Shared w/ LightCycler			
	Biology Lab	RES	BL-7	PCR	3	3	Biorad		33	35	20	Bench		120	20															
	Biology Lab	RES	BL-8	Liquid Handling	0	1	Tecan		60	30	60	Bench																		
	Biology Lab	RES	BL-9	Bioanalyzer	0	1	Agilent		60	30	60	Bench																		
	Biology Lab	RES	BL-10	-30 Degree Freezer	*	2	TBD		33	33	80	Floor		120	20															
	Biology Lab	RES	BL-11	4 Degree	*	2	TBD		60	35	80	Floor		120	20															
	Biology Lab	RES	BL-12	FUTURE																										
	Biology Lab	RES	BL-13	FUTURE																										
	Biology Lab	RES	BL-14	FUTURE																										
	Biology Lab	RES	BL-15	FUTURE																										
				FTE Dedicated Benching - E	5	10																								
				Small Equipment Benching - E	3	4																								

EXHIBIT 3-3, PAGE 5

NEW ROOM NO	NEW ROOM NAME	DEPT	NO	EQUIPMENT	QTY 2015	QTY 2017	MFR	CUT AVAI	EXT. SIZE W	D	H	MOUNTING	WEI	ELECTRICAL VOLT	AMP	PHA	BEM	MECHANICA BTU	FM E	PLUMBING AIR	GAS	VACUU	H2O	CO2	% USE	REMARKS NEW-RELOC-N/C-ETC	Plug Typ NEMA #	Model No.	Serial No.
	WAVE CELL CULTURRE Lab																												
	Biologics				5	12																							
	Cell Culture Lab	REB	CC-1	6' Biosafety Cabinets BSC	4	6	THERMO		53	35	93	Floor		120	14	1			X		X								
	Cell Culture Lab	REB	CC-2	CO2 Inc	4	6	THERMO		26	30	34	Fly Benches		120	20										X				
	Cell Culture Lab	REB	CC-3	Centrifuge	1	2	Beckman		53	35	12	Bench		120	20														
	Cell Culture Lab	REB	CC-4	Aquarium	1	1	Molecular Dev.		13	35	23	Bench		120	20											Loaner from Lab			
	Cell Culture Lab	REB	CC-5	FUTURE																									
	Cell Culture Lab	REB	CC-6	FUTURE																									
	Cell Culture Lab	REB	CC-7	FUTURE																									
	Cell Culture Lab	REB	CC-8	FUTURE																									
	Cell Culture Lab	REB	CC-9	FUTURE																									
	Cell Culture Lab	REB	CC-10	FUTURE																									
				Bench for 2' Cab.	4	6																							
				Equipment Benches - 5'																									

EXHIBIT 3-3, PAGE 6

NEW ROOM NO	NEW ROOM NAME	DEPT	NO	EQUIPMENT 3/1/2015	QTY 2015	QTY 2017	MFR	CUT AWAY	EXT. SIZE W(in)	D(in)	H(in)	MOUNTING	WEIG	VOLTS	AMPS	PHASE	EMER	BTU H	CFM EX	AIR	GAS	VAC	DRAIN	H2O	CO2	UBE	REMARKS NEW-RELOC-NIC-ETC	Plug Typ NEMA #	Model No.	Serial No.
	WAVE GLASSWASH																													
	Glasswash	1,99	GL-1	AUTOCLAVE NEW	*	*	CSS		38	45	80	Floor	800	480		3			300				X	X			CAPTURE HOOD, DRAIN, QUENCHING			
	Glasswash	1,99	GL-2	Drying Oven	*	*	VWR		32	30	36	Bench		208					100								EXHAUST SNORKEL			
	Glasswash	1,99	GL-3	Dishwasher	-	-	LANCER 1500		58	30	51	Floor		208									X	X			EXHAUST			
	Glasswash	1,99	GL-4	[illegible]	*	*	[illegible]		24	24	51	Floor		120									X	X						
	Glasswash	1,99	GL-5	Water System	*	*								120										X			Feeding Autoclave & Dishwasher			
	Glasswash	1,99	GL-6																											
	WAVE EQUIPMENT ROOM																													
	Equipment Room	1,99	EQ-1	-80 Freezer (Chem)	*	2	VWR		33	33	80	Floor		208	20	*	Yes													
	Equipment Room	1,99	EQ-2	-20 Freezer (Chem)	*	2	VWR		34	33	80	Floor		120	20	*	Yes													
	Equipment Room	1,99	EQ-3	Refrigerator (4 Degree - Chem)	*	3	VWR		34	33	80	Floor		120	20	*	Yes													
	Equipment Room	1,99	EQ-4	-80 Freezer (Bio)	*	2	VWR		33	33	80	Floor		[illegible]	20	*	Yes													
	Equipment Room	1,99	EQ-5	-20 Freezer (Bio)	2	3	VWR		33	33	80	Floor		120	20	*	Yes													
	Equipment Room	1,99	EQ-6																											
	WAVE HAZMAT ROOM																													
	Hazmat Storage	1,99	HZ-1	500L Dewar ACN															100								GROUNDING SYSTEM FOR ALL TANKS			
	Hazmat Storage	1,99	HZ-2	100L Dewar ACN															100								GROUNDING SYSTEM FOR ALL TANKS			
	Hazmat Storage	1,99	HZ-3																								GROUNDING SYSTEM FOR ALL TANKS			
	Hazmat Storage	1,99	HZ-4																								GROUNDING SYSTEM FOR ALL TANKS			
	WAVE GAS ROOM																													
	Gas Room	1,99	GAS-1	LN2 Dewar																										
	Gas Room	1,99	GAS-2	LN2 Dewar																										
	Gas Room	1,99	GAS-3	LN2 Dewar																									HEADER FOR DISTRIBUTION			
	Gas Room	1,99	GAS-4	Argon Tank																							ARGON			
	Gas Room	1,99	GAS-5	CO2																						X		CO2 TANK FARM			
	Gas Room	1,99	GAS-6	Compressed Air																										
	WAVE CHEM STORAGE ROOM																													
	CHEM STO	1,99	CS-1	Chem Waste Storage Cab															100											
	CHEM STO	1,99	CS-2	Chem Waste Storage Cab															100											

EXHIBIT 3-4

LANDLORD/TENANT RESPONSIBILITY MATRIX

Landlord/Tenant Responsibility Matrix

3/19/2015

Scope Description	Landlord	Tenant
Office Area Specifications		
Finishes: Furnish and install broad loom carpet (Shaw Illuminate Series), painted drywall, exposed ceilings at skylight areas, Armstrong Dune series acoustical ceiling tiles at main office area, interior butt glazing at Board Room, window shades at exterior windows, (7) 10' x 4' hollow metal interior vision glazing panels into labs, stainless steel corner guards, fire extinguisher cabinets, hardware for lockable rooms (rooms to be determined).	**X**	
Office and Conference Build Out: Construct (6) private offices, (1) small conference room, (1) board room, (1) IT room, and (1) print/copy room. Provide floor cores and conduit for (2) future conference rooms. Electrical wiring and circuits for future conference rooms and offices are not included. Office and conference rooms to receive soundproofing insulation.	**X**	
Furniture: Furnish and install cubicles, work stations and other office furniture (All by Tenant)		**X**
Lighting: Furnish and install 2'x2' LED direct/indirect fixtures at ACT and drywall ceilings. Furnish and install suspended fluorescent lights at open skylight areas.	**X**	
Electrical: Provide power to offices, copy room, general convenience outlets for non specific areas, and Tenant furniture. Provide floor boxes for cubicles (floor cores to be done in one mobilization). Furnish and install floor boxes and conduit for Tenant tel/data and AV in conference rooms. Furnish and install DDC controls and tie into EMS. Furnish and install submeter for Tenant utility consumption. Furnish and install conduit for Tenant tel/data routing to server room. Tenant shall receive their pro-rata share of the existing 800 kW generator that serves the Building.	**X**	
HVAC: Air supplied by existing 50-ton Carrier roof top unit. Furnish and install new ductwork and VAV boxes with hot water reheat coils to condition office areas. Air distribution shall be provided by supply ductwork systems terminating in 2'x2' lay in style diffusers and with plenum return. Ceiling mounted exhaust fans shall be installed in all conference and meeting rooms. A ducted rooftop exhaust fan shall be installed for the bathroom area. Future office areas to receive ductwork with VAV boxes to condition areas with minimal heating/cooling zones. Furnish and install sealed spiral ductwork at exposed ceiling areas and arrange for a neat appearance. Provide additional cooling for server room.	**X**	

Scope Description	Landlord	Tenant
Café Specifications		
Finishes: Furnish and install laminate cabinets and countertops (non-color core), VCT flooring, and painted drywall.	X	
Appliances: Furnish and install (1) stainless steel refrigerator, (1) stainless steel countertop microwave, (1) stainless steel under counter dishwasher	X	
Furniture: TBD, by Tenant		X
Lighting: Furnish and install suspended fluorescent lights.	X	
Lobby Specifications		
Finishes: Furnish and install premium flooring, painted drywall, drywall ceilings.	X	
Furnish and install ornamental stair to mezzanine level	X	
Furniture: Reception desk, other seating, and aquarium by Tenant		X
Lighting: Furnish and install pendant fixtures ($3,000 allowance) and can lighting at lobby.	X	
Bathroom Specifications		
Finishes: Furnish and install plumbing fixtures, solid surface countertops, porcelain floor tile, porcelain wall tile (on wet wall only), drywall ceilings, 2'x2' LED light fixtures.	X	
Lab Specifications - General Description		
Finishes: Furnish and install VCT flooring in all lab areas (except for glass wash which shall have epoxy flooring), vinyl stipple ceilings in all lab areas (except for glass wash which shall have epoxy painted GWB ceiling), hollow metal door frames with wood veneer doors (lab doors have half panel lites), stainless steel corner guards,fire extinguisher cabinets. Lab supply room to receive VCT flooring.	X	
Provide required fire rating to allow Chemistry Lab to be Control Zone #1	X	
Provide required fire rating to allow Synthesis and Synthesis Tank to be Control Zone #2	X	
Remainder of Premises to be Control Zone #3	X	
Provide full height walls demising lab from offices	X	
Reuse existing water heaters	X	
Provide a minimum of six air changes per hour in lab spaces.	X	
Lab case work: Landlord has carried a $30,000 Allowance for lab benches, tables, and reagent shelving. Casework standard is New England Lab "Cambridge Series" 6' x 30" benches with (2) rows of reagent shelving and (1) 18" wide drawer base, and 5' x 30" lab tables.	X	
Lab case work: Tenant shall contribute $70,000 towards lab case work and other equipment as a Change Order to the project.		X

Scope Description	Landlord	Tenant
Plumbing and lab utilities: Furnish and install lab sinks per room descriptions below with bases and underground plumbing to new gravity fed pH neutralization system, compressed air and vacuum to Chemical Fume Hoods, (16) emergency eyewash/emergency showers, new vacuum pump, new air compressor. Provide water tie-in accomodation for RODI polishing unit at one sink per lab. Provide tempered water system for emergency showers and eyewashes.	**X**	
Electric: Tenant shall receive their pro-rata share of the existing 800 kW generator that serves the Building. Landlord shall provide DDC controls and tie into EMS. Landlord to furnish and install submeter for Tenant utility consumption. Landlord shall provide 120 and 208 power to all equipment in the Equipment Room.	**X**	
Chemistry Lab Specifications		
Finishes: Furnish and install VCT flooring, vinyl stipple ceilings, hollow metal door frames with wood veneer doors (lab doors have half panel lites)	**X**	
Lab equipment: Furnish and install (6) 6’ Low Flow Chemical Fume Hoods and (1) 6’ Normal Flow Chemical Fume Hood.	**X**	
Lab case work: See allowance description above.	**X**	
Plumbing and lab utilities: Furnish and install (3) lab sinks with bases plumbed to pH neutralization system, (15) vacuum drops, (10) compressed air drops, (10) argon drops, (1) nitrogen drop, (1) CO2 drop.	**X**	
HVAC: Air supplied by existing 90-ton, 18,000 CFM, 100% outside air, McQuay make up air unit. Furnish and install new ductwork and VAV boxes with hot water reheat coils. Chemistry lab will utilize Tek Air hood management systems for the Chemical Fume Hoods and the supply air for the room.	**X**	
Electrical: Furnish and install indirect/direct 2’x4’ and 2’x2’ LED lighting coordinated with bench locations. Power wiring for lab equipment.	**X**	
Synthesis and Synthesis Tank Specifications		
Finishes: Furnish and install static dissipative VCT flooring, vinyl stipple ceilings, hollow metal door frames with wood veneer doors (lab doors have half panel lites)	**X**	
Lab equipment: Furnish and install (1) 8’ Low Flow Chemical Fume Hood	**X**	
Lab case work: See allowance description above.	**X**	
Plumbing and lab utilities: Furnish and install (1) lab sink with bases plumbed to pH neutralization system, (5) vacuum drops, (5) compressed air drops, (5) argon drops.	**X**	

Scope Description	Landlord	Tenant
HVAC: Air supplied by existing 90-ton, 18,000 CFM, 100% outside air, McQuay make up air unit. Furnish and install new ductwork and VAV boxes with hot water reheat coils. The Synthesis Lab will utilize Tek Air hood management systems for the Chemical Fume hoods and the supply air for the room.	X	
Electrical: Furnish and install indirect/direct 2'x4' and 2'x2' LED lighting coordinated with bench locations. Power wiring for lab equipment.	X	
Purification Analysis Lab Specifications		
Finishes: Furnish and install VCT flooring, vinyl stipple ceilings, hollow metal door frames with wood veneer doors (lab doors have half panel lites)	X	
Lab case work: See allowance description above.	X	
Plumbing and lab utilities: Furnish and install (1) lab sink with bases plumbed to pH neutralization system, (4) vacuum drops, (4) compressed air drops, (4) nitrogen drops	X	
HVAC: Air supplied by existing 90-ton, 18,000 CFM, 100% outside air, McQuay make up air unit. Furnish and install new ductwork and VAV boxes with hot water reheat coils.	X	
Electrical: Furnish and install indirect/direct 2'x4' and 2'x2' LED lighting coordinated with bench locations. Power wiring for lab equipment.	X	
Cell Culture Room Specifications		
Finishes: Furnish and install VCT flooring, vinyl stipple ceilings, hollow metal door frames with wood veneer doors (lab doors have half panel lites)	X	
Lab equipment: Furnish and install (4) Bio Safety Cabinets		X
Lab case work: See allowance description above.	X	
Plumbing and lab utilities: Furnish and install (1) lab sink with bases plumbed to pH neutralization system, (7) vacuum drops, (2) CO2 drops.	X	
HVAC: Air supplied by existing 40-ton, 8,000 CFM, 100% outside air, AAON make up air unit. Furnish and install new ductwork and VAV boxes with hot water reheat coils.	X	
Electrical: Furnish and install indirect/direct 2'x4' and 2'x2' LED lighting coordinated with bench locations. Power wiring for lab equipment.	X	
Glass Wash Room Specifications		
Finishes: Furnish and install epoxy flooring, epoxy ceilings, hollow metal door frames with metal door (lab doors have half panel lites)	X	

Scope Description	Landlord	Tenant
Lab equipment: Furnish and install (1) Under Counter Glass Washer in fixed sink base. Furnish and install utilities and services future standalone autoclave including electrical capacity (up to 208 power), drains, water, and exhaust.	**X**	
Lab case work: See allowance description above.	**X**	
Plumbing and lab utilities: Furnish and install (1) glass wash sink plumbed to pH neutralization system, emergency eyewash and emergency showers. Provide plumbing for new stainless steel scullery sink to be installed in the future.	**X**	
HVAC: Air supplied by existing 90-ton, 18,000 CFM, 100% outside air, McQuay make up air unit. Furnish and install new ductwork and VAV boxes with hot water reheat coils.	**X**	
Electrical: Furnish and install indirect/direct 2'x4' and 2'x2' LED lighting coordinated with bench locations. Power wiring for lab equipment.	**X**	
Biology Lab Specifications		
Finishes: Furnish and install VCT flooring, vinyl stipple ceilings, hollow metal door frames with wood veneer doors (lab doors have half panel lites)	**X**	
Lab case work: See allowance description above.	**X**	
Plumbing and lab utilities: Install underground plumbing for (4) future lab sinks to pH neutralization system. Distribution of all other lab utilities and gases is not included.	**X**	
HVAC: Air supplied by existing 40-ton, 8,000 CFM, 100% outside air, AAON make up air unit. Duct work shall be stubbed to the lab to condition space but no branch distribution throughout the Bio Lab.	**X**	
Electrical: Furnish and install convenience outlet at each wall. Furnish and install 2'x2' LED light fixtures to light room. Lighting and power is not intended to be coordinated with future lab benches or casework.	**X**	
Security, card access,tele-data, and A/V		**X**

EXHIBIT 4

PLAN SHOWING PARKING AREAS ON LAND

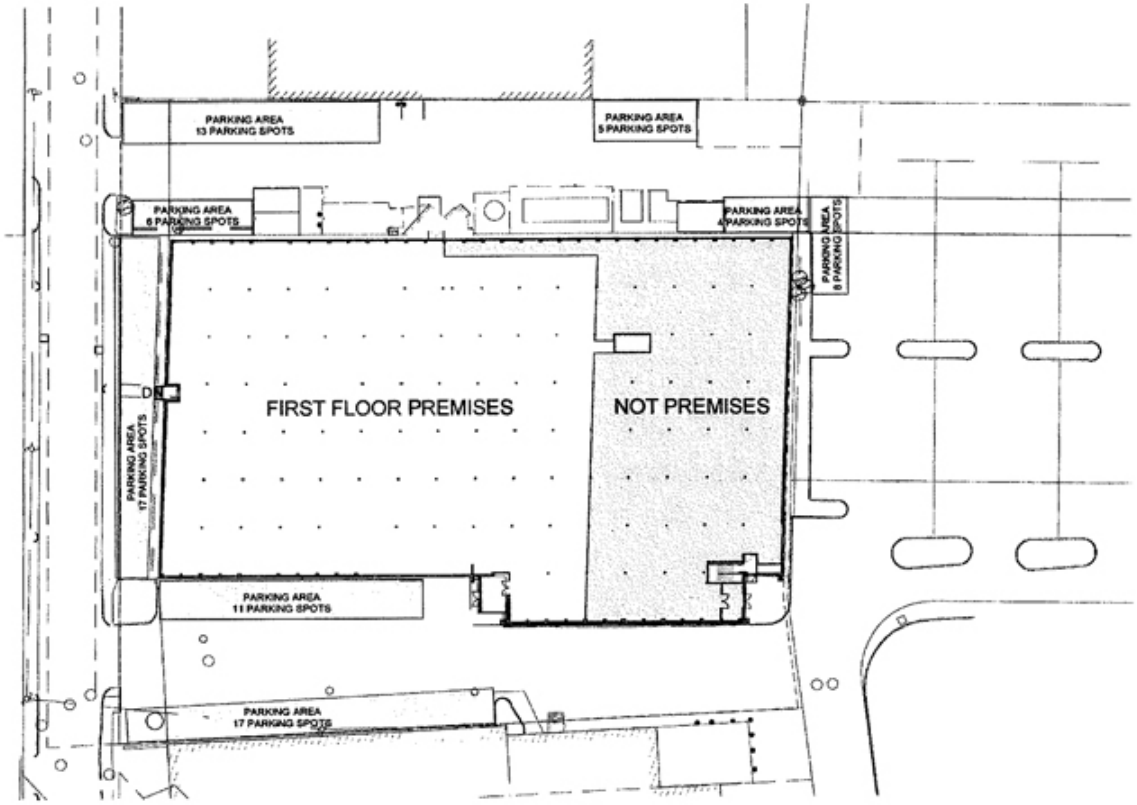

EXHIBIT 5

FORM OF LETTER OF CREDIT

BENEFICIARY:

< >
[LANDLORD]

ISSUANCE DATE:

IRREVOCABLE STANDBY
LETTER OF CREDIT NO.

ACCOUNTEE/APPLICANT:

< >
[TENANT]

MAXIMUM/AGGREGATE
CREDIT AMOUNT:
USD: $_____.____

LADIES AND GENTLEMEN:

We hereby establish our irrevocable letter of credit in your favor for account of the applicant up to an aggregate amount not to exceed _____and ____/100 US Dollars ($_____.____) available by your draft(s) drawn on ourselves at sight bearing the clause "Drawn under Irrevocable Standby Letter of Credit Number _____" and indicating the amount to be drawn down and whether payment should be made by wire transfer (including wiring instructions) or by certified check (including mailing address) accompanied by the original of this Letter of Credit and all amendments, if any. The original Letter of Credit and all amendments, if any, shall be returned to you unless fully utilized.

Unless otherwise stated, all correspondence, documents and sight drafts are to be sent via facsimile to (_____) _____-_____with originals to follow by hand delivery with receipted delivery, nationally recognized overnight courier with receipted delivery or certified mail, return receipt requested to our counters at _____<address>. The date of presentment of any draw shall be the date copies of the Letter of Credit and sight draft are faxed by Beneficiary to _____<bank>.

You shall have the right to make partial draws against this Letter of Credit, from time to time.

You shall be entitled to assign your interest in this Irrevocable Standby Letter of Credit from time to time to your lender(s) and/or your successors in interest without our approval and without charge. In the event of an assignment, we reserve the right to require reasonable evidence of such assignment as a condition to any draw hereunder.

Except as otherwise expressly stated herein, this Letter of Credit is subject to the "Uniform Customs and practice for Documentary Credits, International Chamber of Commerce, Publication No. 500 (1993 Revision)".

This Letter of Credit shall expire at our office on _____, 20____ (the "**Stated Expiration Date**"). It is a condition of this Letter of Credit that the Stated Expiration Date shall be deemed automatically extended without amendment for successive one (1) year periods from such Stated Expiration Date, unless at least sixty (60) days prior to such Stated Expiration Date (or any anniversary thereof) we shall send a written notice to you, with a copy to Goulston & Storrs, 400 Atlantic Avenue, Boston, MA 02110, Attention: Phillip Levy, Esq. and to the Accountee/Applicant, by hand delivery, nationally recognized overnight courier with receipted delivery or by certified mail (return receipt requested) that we elect not to consider this Letter of Credit extended for any such additional one (1) year period. In the event that this Letter of Credit is not extended for an additional period as provided above, you may draw the entire amount available hereunder.

If at any time prior to presentation of documents for payment hereunder, we receive a notarized certificate signed by one who purports to be a duly authorized representative on your behalf to execute and deliver such certificate, stating that this Letter of Credit has been lost, stolen, damaged or destroyed, we will mail you a "Certified True Copy" of this Letter of Credit, which shall be treated by us as an original.

In order to cancel this Letter of Credit prior to expiration, you must return this original Letter of Credit and any amendments hereto to our counters with a statement signed by you stating that the Letter of Credit is no longer required and is being returned to the issuing bank for cancellation.

We hereby agree with the drawers, endorsers and bonafide holders that the drafts drawn under and in accordance with the terms and condition of this Letter of Credit shall be duly honored upon presentation.

EXHIBIT 6

LANDLORD’S SERVICES

- Hot/cold water to common restrooms
- Electricity for interior Common Areas
- Snow and ice removal
- Management and administrative service
- Grounds maintenance
- Such other services as Landlord reasonably determines are necessary or appropriate for the Property

LANDLORD CONSENT TO ASSIGNMENT AND ASSUMPTION

This Consent is entered into as of this _____ day of _____, 19____ by and among _____**, a(n)** _____, ("Landlord"), _____**, a(n)** _____ ("Assignor") and _____**, a(n)** _____ ("Assignee").

RECITALS:

A. Landlord (as successor in interest to _____), as landlord, and Assignor (as successor in interest to _____), as tenant, are parties to that certain lease agreement dated _____, as amended and/or assigned by instrument(s) dated _____, _____, and _____ (collectively, the "Lease") pursuant to which Landlord has leased to Assignor certain premises containing approximately _____ rentable square feet (the "Premises") known as Suite No(s). ____ on the ____ floor(s) of the building commonly known as _____ located at _____ (the "Building").

B. Assignor and Assignee have entered into that certain agreement ("Assignment Agreement") attached hereto as **Exhibit A** whereby Assignor assigned all of its right, title and interest in and to the Lease to Assignee.

C. Assignor and Assignee have requested Landlord's consent to the Assignment Agreement and the transaction described therein.

D. Landlord has agreed to give such consent upon the terms and conditions contained in this Consent.

NOW THEREFORE, in consideration of the foregoing recitals which by this reference are incorporated herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Landlord, Assignor and Assignee agree and represent as follows:

1. Assignment Agreement. Assignor and Assignee hereby represent and warrant that: (a) a true, complete and correct copy of the Assignment Agreement is attached hereto as **Exhibit A**; and (b) the Assignment Agreement fully assigns all of Assignor's right, title and interest in the Lease to Assignee (the "Transfer").

2. Representations. Assignor hereby represents and warrants that Assignor (i) has full power and authority to assign its entire right, title and interest in the Lease to Assignee; (ii) has not transferred or conveyed its interest in the Lease to any person or entity, collaterally or otherwise; (iii) has full power and authority to enter into the Assignment Agreement and this Consent; and (iv) has assigned the entire Security Deposit, if any, as described in Section _____ of the Lease, to Assignee, and Assignor has full power and authority to do the same. Assignee hereby represents and warrants that Assignee has full power and authority to enter into the Assignment Agreement and this Consent.

3. Assumption. Notwithstanding anything to the contrary contained in the Assignment Agreement, Assignee, for itself and its successors and assigns, hereby assumes and agrees to perform and be bound by all of the covenants, agreements, provisions, conditions and obligations of the tenant under the Lease, including but not limited to, the obligation to pay Landlord for all adjustments of rent and other additional charges payable pursuant to the terms of the Lease. Nothing contained in the Assignment Agreement shall be deemed to amend, modify or alter in any way the terms, covenants and conditions set forth in the Lease.

4. No Release. Nothing contained in the Assignment Agreement or this Consent shall be construed as relieving or releasing the Assignor from any of its obligations under the Lease, and it is expressly understood that Assignor shall remain liable for such obligations notwithstanding the subsequent assignment(s), sublease(s) or transfer(s) of the interest of the tenant under the Lease.

5. Review Fee. Upon Assignor's execution and delivery of this Consent, Assignor shall pay to Landlord the sum of _____ Dollars ($_____) in consideration for Landlord's review of the Assignment Agreement and preparation of this Consent.

6. Landlord's Consent. In reliance upon the agreements and representations contained in this Consent, Landlord hereby consents to the Transfer. This Consent shall not constitute a waiver of the obligation of the tenant under the Lease to obtain the Landlord's consent to any subsequent assignment, sublease or other transfer under the Lease, nor shall it constitute a waiver of any existing defaults under the Lease.

7. Notice Address. Any notices to Assignee shall be effective when served to Assignee at the Premises in accordance with the terms of the Lease. From and after the effective date of the Assignment, notices to Assignor shall be served at the following address: _____.

8. Counterparts. This Consent may be executed in counterparts and shall constitute an agreement binding on all parties notwithstanding that all parties are not signatories to the original or the same counterpart provided that all parties are furnished a copy or copies thereof reflecting the signature of all parties.

IN WITNESS WHEREOF, Landlord, Assignor and Assignee have executed this Consent on the day and year first above written.

Signed and acknowledged:
in the presence of:

_____

LANDLORD: _____ ,
a(n) _____

By: _____

_____

By: _____

_____

By: _____

Name: _____

Title: _____

ASSIGNOR: _____ ,

a(n) _____

By: _____

Name: _____

Title: _____

ASSIGNEE: _____ ,

a(n) _____

By: _____

Name: _____

Title: _____

EXHIBIT A

COPY OF ASSIGNMENT AGREEMENT

EXHIBIT 7-2

LANDLORD CONSENT TO SUBLEASE

THIS LANDLORD CONSENT TO SUBLEASE ("Consent Agreement") is entered into as of the _____ day of _____, 20__, by and among _____, a(n) _____ ("Landlord"), _____, a(n) _____ ("Sublandlord"), and _____, a(n) _____ ("Subtenant").
RECITALS:

A. Landlord (as successor in interest to _____), as landlord, and Sublandlord (as successor in interest to _____), as tenant, are parties to that certain lease agreement dated _____,as amended by instrument(s) dated _____, and _____(collectively, the "Lease") pursuant to which Landlord has leased to Sublandlord certain premises containing approximately _____rentable square feet (the "Premises") described as Suite No(s). _____ on the _____ floor(s) of the building commonly known as _____located at _____ (the "Building").

B. Sublandlord and Subtenant have entered into (or are about to enter into) that certain sublease agreement dated _____ attached hereto as Exhibit A (the "Sublease") pursuant to which Sublandlord has agreed to sublease to Subtenant certain premises described as follows: _____ (the "Sublet Premises") constituting all or a part of the Premises.

C. Sublandlord and Subtenant have requested Landlord's consent to the Sublease.

D. Landlord has agreed to give such consent upon the terms and conditions contained in this Agreement.

NOW THEREFORE, in consideration of the foregoing preambles which by this reference are incorporated herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Landlord hereby consents to the Sublease subject to the following terms and conditions, all of which are hereby acknowledged and agreed to by Sublandlord and Subtenant:

1. Sublease Agreement. Sublandlord and Subtenant hereby represent that a true and complete copy of the Sublease is attached hereto and made a part hereof as Exhibit A, and Sublandlord and Subtenant agree that the Sublease shall not be modified without Landlord's prior written consent, which consent shall not be unreasonably withheld.

2. Representations. Sublandlord hereby represents and warrants that Sublandlord (i) has full power and authority to sublease the Sublet Premises to Subtenant, (ii) has not transferred or conveyed its interest in the Lease to any person or entity collaterally or otherwise, and

(iii) has full power and authority to enter into the Sublease and this Consent Agreement. Subtenant hereby represents and warrants that Subtenant has full power and authority to enter into the Sublease and this Consent Agreement.

3. Indemnity and Insurance. Subtenant hereby assumes, with respect to Landlord, all of the indemnity and insurance obligations of the Sublandlord under the Lease with respect to the Sublet Premises, provided that the foregoing shall not be construed as relieving or releasing Sublandlord from any such obligations.

4. No Release. Nothing contained in the Sublease or this Consent Agreement shall be construed as relieving or releasing Sublandlord from any of its obligations under the Lease, it being expressly understood and agreed that Sublandlord shall remain liable for such obligations notwithstanding anything contained in the Sublease or this Consent Agreement or any subsequent assignment(s), sublease(s) or transfer(s) of the interest of the tenant under the Lease. Sublandlord shall be responsible for the collection of all rent due it from Subtenant, and for the performance of all the other terms and conditions of the Sublease, it being understood that Landlord is not a party to the Sublease and, notwithstanding anything to the contrary contained in the Sublease, is not bound by any terms, provisions, representations or warranties contained in the Sublease and is not obligated to Sublandlord or Subtenant for any of the duties and obligations contained therein.

5. Administrative Fee. Upon Sublandlord's execution and delivery of this Consent Agreement, Sublandlord shall pay to Landlord the sum of $_____ in consideration for Landlord's review of the Sublease and the preparation and delivery of this Consent Agreement.

6. No Transfer. Subtenant shall not further sublease the Sublet Premises, assign its interest as the Subtenant under the Sublease or otherwise transfer its interest in the Sublet Premises or the Sublease to any person or entity without the written consent of Landlord, which Landlord may withhold in its sole discretion.

7. Lease. The parties agree that the Sublease is subject and subordinate to the terms of the Lease, and all terms of the Lease, other than Sublandlord's obligation to pay *[Base Rent]*, are incorporated into the Sublease. In no event shall the Sublease or this Consent Agreement be construed as granting or conferring upon the Sublandlord or the Subtenant any greater rights than those contained in the Lease nor shall there be any diminution of the rights and privileges of the Landlord under the Lease, nor shall the Lease be deemed modified in any respect. Without limiting the scope of the preceding sentence, any construction or alterations performed in or to the Sublet Premises shall be performed with Landlord's prior written approval and in accordance with the terms and conditions of the Lease. It is hereby acknowledged and agreed that any provisions in the Sublease which limit the manner in which Sublandlord may amend the Lease are binding only upon Sublandlord and Subtenant as between such parties. Landlord shall not be bound in any manner by such provisions and may rely upon Sublandlord's execution of any agreements amending or terminating the Lease subsequent to the date hereof notwithstanding any contrary provisions in the Sublease.

8. Parking and Services. Any parking rights granted to Subtenant pursuant to the Sublease shall be satisfied out of the parking rights, if any, granted to Sublandlord under the Lease. Sublandlord hereby authorizes Subtenant, as agent for Sublandlord, to obtain services and materials for or related to the Sublet Premises, and Sublandlord agrees to pay for such services and materials as additional Rent under the Lease upon written demand from Landlord. However, as a convenience to Sublandlord, Landlord may bill Subtenant directly for such services and materials, or any portion thereof, in which event Subtenant shall pay for the services and materials so billed upon written demand, provided that such billing shall not relieve Sublandlord from its primary obligation to pay for such services and materials.

9. Attornment. If the Lease or Sublandlord's right to possession thereunder terminates for any reason prior to expiration of the Sublease, Subtenant agrees, at the written election of Landlord, to attorn to Landlord upon the then executory terms and conditions of the Sublease for the remainder of the term of the Sublease. In the event of any such election by Landlord, Landlord will not be (a) liable for any rent paid by Subtenant to Sublandlord more than one month in advance, or any security deposit paid by Subtenant to Sublandlord, unless same has been transferred to Landlord by Sublandlord; (b) liable for any act or omission of Sublandlord under the Lease, Sublease or any other agreement between Sublandlord and Subtenant or for any default of Sublandlord under any such documents which occurred prior to the effective date of the attornment; (c) subject to any defenses or offsets that Subtenant may have against Sublandlord which arose prior to the effective date of the attornment; (d) bound by any changes or modifications made to the Sublease without the written consent of Landlord, (e) obligated in any manner with respect to the transfer, delivery, use or condition of any furniture, equipment or other personal property in the Sublet Premises which Sublandlord agreed would be transferred to Subtenant or which Sublandlord agreed could be used by the Subtenant during the term of the Sublease, or (f) liable for the payment of any improvement allowance, or any other payment, credit, offset or amount due from Sublandlord to Subtenant under the Sublease. If Landlord does not elect to have Subtenant attorn to Landlord as described above, the Sublease and all rights of Subtenant in the Sublet Premises shall terminate upon the date of termination of the Lease or Sublandlord's right to possession thereunder. The terms of this Section 9 supercede any contrary provisions in the Sublease.

10. Payments Under the Sublease. If at any time Sublandlord is in default under the terms of the Lease, Landlord shall have the right to contact Subtenant and require Subtenant to pay all rent due under the Sublease directly to Landlord until such time as Sublandlord has cured such default. Subtenant agrees to pay such sums directly to Landlord if requested by Landlord, and Sublandlord agrees that any such sums paid by Subtenant shall be deemed applied against any sums owed by Subtenant under the Sublease. Any such sums received by Landlord from Subtenant shall be received by Landlord on behalf of Sublandlord and shall be applied by Landlord to any sums past due under the Lease, in such order of priority as required under the Lease or, if the Lease is silent in such regard,

then in such order of priority as Landlord deems appropriate. The receipt of such funds by Landlord shall in no manner be deemed to create a direct lease or sublease between Landlord and Subtenant. If Subtenant fails to deliver its Sublease payments directly to Landlord as required herein following receipt of written notice from Landlord as described above, then Landlord shall have the right to remove any signage of Subtenant, at Subtenant's cost, located outside the Premises or in the Building lobby or elsewhere in the Building and to pursue any other rights or remedies available to Landlord at law or in equity.

11. Excess Rent. If Landlord is entitled to any excess rent (defined below) from Sublandlord pursuant to the terms of the Lease, then, in addition to all rent otherwise payable by Sublandlord to Landlord under the Lease, Sublandlord shall also pay to Landlord the portion of the excess rent to which Landlord is entitled under the Lease, in the manner described in the Lease. As used herein, the "excess rent" shall be deemed to mean any payments from Subtenant under the Sublease which exceed the payments payable by Sublandlord to Landlord under the Lease for the Sublet Premises. Landlord's failure to bill Sublandlord for, or to otherwise collect, such sums shall in no manner be deemed a waiver by Landlord of its right to collect such sums in accordance with the Lease.

12. Sublandlord Notice Address. If Sublandlord is subleasing the entire Premises or otherwise vacating the Premises, Sublandlord's new address for notices to Sublandlord under the Lease shall be as follows: _____; and if no address is filled in at the preceding blank (or if a post office box address is used for the preceding blank), then Landlord may continue to send notices to Sublandlord at the address(es) provided in, and in accordance with the terms of, the Lease.

13. Authority. Each signatory of this Consent Agreement represents hereby that he or she has the authority to execute and deliver the same on behalf of the party hereto for which such signatory is acting.

14. Counterparts. This Consent Agreement may be executed in counterparts and shall constitute an agreement binding on all parties notwithstanding that all parties are not signatories to the original or the same counterpart provided that all parties are furnished a copy or copies thereof reflecting the signature of all parties.

15. Consent and Acknowledgment of Guarantor. Unless the following condition is waived in writing by Landlord, then, at Landlord's option, this Consent Agreement shall be of no force and effect unless and until accepted by any guarantors of the Lease, who by signing below hereby (a) consent to the Sublease, (b) ratify their guarantee, and (c) agree that their guarantee shall apply to the Lease and continue in full force and effect notwithstanding the Sublease.

[SIGNATURES ARE ON FOLLOWING PAGE]

IN WITNESS WHEREOF, Landlord, Sublandlord and Subtenant have executed this Consent Agreement as of the date set forth above.

WITNESS/ATTEST:

=

Name (print):

Name (print):

LANDLORD:

, a(n)

By: a(n)

By: , a(n)

Name:

Title:

WITNESS/ATTEST:

Name (print):

Name (print):

SUBLANDLORD:

, a(n)

By:

Name:

Title:

WITNESS/ATTEST:

Name (print):

Name (print):

SUBTENANT:

, a(n)

By:

Name:

Title:

EXHIBIT 8

ENVIRONMENTAL ASSESSMENT REPORT

Phase 1 Environmental Site Assessment, Project No. BEC 11-108, prepared by Boston Environmental Corporation, dated March 11, 2011.

EXHIBIT 9

RULES AND REGULATIONS

733 Concord Avenue, CAMBRIDGE, MA

A. General

1. Tenant and its employees shall not in any way obstruct the sidewalks, halls, stairways, or exterior vestibules of the Building, and shall use the same only as a means of passage to and from their respective offices. Unless expressly provided for in the Lease and then only with the express permission of the Landlord, access to the roof is not permitted.

2. Corridor doors, when not in use, shall be kept closed.

3. Areas used in common by tenants, including the loading dock and the loading vestibule shall be subject to such reasonable regulations as are posted therein.

4. No companion animals, except Seeing Eye dogs, shall be brought into or kept in, on or about the Premises or Common Areas; provided however, the foregoing restriction shall not apply to any laboratory animals used by Tenant in connection with its research and development activities.

5. Alcoholic beverages (without Landlord's prior written consent, which shall not be unreasonably withheld, delayed, or conditioned), illegal drugs or other illegal controlled substances are not permitted in the Common Areas, nor will any person under the influence of the same be permitted in the Common Areas. Landlord reserves the right to exclude or expel from the Building any persons who, in the judgment of the Landlord, is under the influence of alcohol or drugs, or shall do any act in violation of the rules and regulations of the Building.

6. No firearms or other weapons are permitted in the Common Areas.

7. No fighting or "horseplay" will be tolerated at any time in the Common Areas.

8. Tenant shall not cause the need for any additional janitorial labor or services in the Common Areas by reason of Tenant's carelessness or indifference in the preservation of good order and cleanliness.

9. Smoking and discarding of smoking materials by Tenant and/or any Tenant Party is permitted only in exterior locations designated by Landlord. Tenant will instruct and notify its employees and visitors of such policy.

10. Bicycles and other vehicles are not permitted inside the Building or on the walkways outside the Building, except in those areas specifically designated by Landlord for such purposes

11. Tenant shall not operate or permit to be operated on the Premises any coin or token operated vending machine or similar device (including, without limitation,

telephones, lockers, toilets, scales, amusement devices and machines for sale of beverages food, candy, cigarettes or other goods), except for those vending machines or similar devices which are for the sole and exclusive use of tenant's employees.

12. Canvassing, soliciting, and peddling in or about the Building is prohibited. Tenant, its employees, agents and contractors shall cooperate with said policy, and Tenant shall cooperate and use best efforts to prevent the same by Tenant's invitees.

13. Fire protection and prevention practices implemented by the Landlord from time to time in the Common Areas, including participation in fire drills, must be observed by Tenant at all times.

14. Except as provided for in the Lease, no signs, advertisements or notices shall be painted or affixed on or to any windows, doors or other parts of the Building that are visible from the exterior of the Building unless approved in writing by the Landlord.

15. The restroom fixtures shall be used only for the purpose for which they were constructed and no rubbish, ashes, or other substances of any kind shall be thrown into them. Tenant will bear the expense of any damage resulting from misuse.

16. Tenant will not interfere with or obstruct any perimeter heating, air conditioning or ventilating units.

17. Tenant shall cause the Premises to be exterminated per the Lease. Except as included in Landlord's Services, Tenant shall bear the cost and expense of such pest control services.

18. Tenant shall not install, operate or maintain in the Premises or in any other area of the Building, any electrical equipment which does not bear the U/L (Underwriters Laboratories) seal of approval, or which would overload the electrical system or any part thereof beyond its capacity for proper, efficient and safe operation as determined by Landlord, taking into consideration the overall electrical system and the present and future requirements of the Building.

19. Tenants shall not perform improvements or alterations within the Building or their Premises, if the work has the potential of disturbing the fireproofing which has been applied on the surfaces of structural steel members, without the prior written consent of Landlord, if applicable.

20. Tenant shall manage its waste removal and janitorial program in a manner acceptable to the Landlord, at its sole cost and expense, keeping any recyclables, garbage, trash, rubbish and refuse neatly stored in vermin- proof containers for Tenants sole use within the Premises or Landlord designated area until removed with all removal to be performed during non-business hours. Tenant shall not place in any waste receptacle, dumpster, or building compactor any biohazard materials, hazardous material, or other material that cannot be disposed of in the ordinary and customary manner of trash and garbage.

21. Lab operators who travel outside lab space must abide by the “one glove rule” and remove lab coats where predetermined. For the avoidance of doubt, the “one glove rule” is intended to ensure that lab personnel use an ungloved hand to touch common area surfaces.

22. In order to maximize the safety and effectiveness of first responders who must enter the Premises in emergency, Tenant shall maintain chemical lists and MSDS sheets at readily identifiable and accessible locations at the entrance to each lab area.

23. Tenant shall provide Landlord, in writing, the names and contact information of two (2) representatives authorized by Tenant to request Landlord services, either billable or non-billable and to act as a liaison for matters related to the Premises.

B. Access & Security

1. Landlord reserves the right to close and keep locked all entrance and exit doors of the Building during the hours Landlord may deem advisable for the adequate protection of the Property. Use of the Building and the leased premises before 8 AM or after 6 PM, or any time during Saturdays, Sundays or legal holidays shall be allowed only to persons with a key/card key to the Building or guests accompanied by such persons. Any persons found in the Building after hours without such keys/card keys are subject to the surveillance of building staff.

2. Tenant shall not place any additional lock or locks on any exterior door in the Premises or Building or on any door in the Building core within the Premises, including doors providing access to the telephone and electric closets and the slop sink, without Landlord’s prior written consent. A reasonable number of keys to the locks on the doors in the Premises shall be furnished by Landlord to Tenant at the cost of Tenant, and Tenant shall not have any duplicate keys made. All keys shall be returned to landlord at the expiration or earlier termination of this Lease.

3. Landlord may from time to time adopt appropriate systems and procedures for the security or safety of the Building, its occupants, entry and use, or its contents, provided that Tenant shall have access to the Building 24 hours per day, 7 days a week. Tenant, Tenant’s agents, employees, contractors, guests and invitees shall comply with Landlord’s reasonable requirements relative thereto.

4. Tenant acknowledges that Property security problems may occur which may require the employment of additional security measures in the day-to-day operation of the Common Areas. Accordingly, Tenant agrees to cooperate and cause its employees, contractors, and other representatives to cooperate fully with Landlord in the implementation of any reasonable security procedures concerning the Common Areas.

5. Tenant and its employees, agents, contractors, invitees and licensees are limited to the Premises and the Common Areas. Tenants and its employees, agents, contractors, invitees and licensees may not enter other areas of the Project (other than the Common Areas) except when accompanied by an escort from the Landlord.

C. Shipping/Receiving

1. Dock areas for the Building including the loading vestibule shall not be used for storage or staging by Tenant.

2. In no case shall any truck or trailer be permitted to remain in a loading dock area for more than 45 minutes.

3. There shall not be used in any Common Area, either by Tenant or by delivery personnel or others, in the delivery or receipt of merchandise, any hand trucks, except those equipped with rubber tires and sole guards.

5. Lab operators carrying any lab related materials may only travel within the Premises and to and from the loading dock.

6. Any dry ice brought into the building must be delivered through the loading dock.

7. All nitrogen tanks must travel through the loading dock and should never be left unattended outside of the Premises.

D. Parking

1. Unless otherwise stipulated in the Lease, parking is on an unassigned, non-reserved basis. Tenant shall park in conformity with all signs and other markings and will honor all reserved and handicap parking spaces.

2. Parking of any trailers, trucks, motor homes, or unregistered vehicles in the parking areas is prohibited.

3. Vehicles may not be stored in the Parking Spaces, however, overnight parking shall be permitted with notice to the Management Company.

4. Washing, maintenance and repair of motor vehicles in the Parking Spaces is expressly prohibited. Disabled vehicles shall be removed within forty-eight (48) hours.

E. Moving

1. Tenant shall provide Landlord with reasonable notice of move in and/or move out of equipment and/or furniture. In the case of move out or removals, Tenant shall provide notice in writing.

2. Moving shall be performed during normal business hours unless otherwise approved by Landlord. Tenant will be responsible for any additional costs incurred by Landlord for after business hours use.

3. Certificate of insurance shall be provided by Tenant’s contractor naming Landlord and Landlord’s managing agent as additional insureds.

4. Tenant shall cause its moving contractor to provide protection to all Common Area floors and walls. All dollies and handcarts must be equipped with rubber wheels. Tenant’s

moving contractor shall be responsible for the off-site removal of any boxes, padding, and other associated trash from the common areas. Disposal of trash from moving shall not be permitted in the Building dumpster or compactor.

EXHIBIT 10

FORM OF NOTICE OF LEASE

NOTICE OF LEASE

733 Concord Avenue
Cambridge, Massachusetts

Pursuant to Section 4 of Chapter 183 of the General Laws of Massachusetts, notice is hereby given of the following described lease (the "Lease"):

LEASE EXECUTION DATE:	March __, 2015
LANDLORD:	KING 773 CONCORD LLC, a Delaware limited liability company, whose address is c/o King Street Properties 200 CambridgePark Drive, Cambridge, MA 02140, Attention: Stephen D. Lynch
TENANT:	WAVE LIFE SCIENCES USA, INC., a Delaware corporation, whose address is 419 Western Avenue, Boston, Massachusetts 02135 Attention: Paul B. Bolno ad Kyle Moran
PROPERTY:	The land described in Exhibit A attached hereto and depicted on Exhibit B attached hereto (the "Land"), now commonly known as 733 Concord Avenue, Cambridge, Massachusetts, including the building (the "Building") in which the Premises are located, together with other improvements thereon and other areas used from time to time for driveways, landscaping and parking for the Building.
PREMISES:	An area on the first (1st) floor of the Building, containing approximately 25,911 rentable square feet, and an area on the mezzanine level of the Building, containing approximately 4,982 rentable square feet, depicted as the Premises and Mezzanine Premises respectively on Exhibit C and Exhibit C-1 attached hereto.
TERM COMMENCEMENT DATE:	The earlier of: (i) the date that Tenant first commences to use the Premises, or any portion thereof, for any Permitted Use, or (ii) the later of: (x) August 15, 2015, or (y) Substantial Completion of Landlord's Work, as defined in the Lease.

	The parties estimate that the Term Commencement Date will occur on or about the August __, 2015.
EXPIRATION DATE:	The date that is seven (7) years and six (6) months after the Term Commencement Date, except that if the Term Commencement Date does not occur on the first day of a calendar month, then the Expiration Date shall be the last day of the calendar month in which the date which is seven (7) years and six (6) months following the Term Commencement Date occurs
RENEWAL:	Tenant may extend the Lease Term for one (1) additional period of five (5) years each in accordance with Section 1.2 of the Lease.
PARKING:	During the Term, Landlord shall, subject to the terms of the Lease make available up to eighty (81) surface parking spaces for Tenant's exclusive use located in the surface parking area serving the Property.
ROOFTOP USE:	During the Term, Tenant shall have the right to use a portion of the Rooftop Premises of the Building in the location shown on Exhibit 1C in the Lease
NAME OF BUILDING:	In no event shall the name of the Building be changed, during the Term of this Lease, to be the name of another tenant of the Building.
FAÇADE SIGNAGE:	Landlord covenants and agrees that, so long as the Facade Signage Conditions in the Lease are satisfied, then there shall be no other signage permitted on the south facing wall of the Building.

This Notice of Lease is executed only for the purpose of giving notice of the existence of the Lease and is not intended to modify, expand or reduce any of the rights of Landlord and Tenant as set forth in the Lease. All terms not otherwise defined herein shall have the meanings set forth in the Lease.

[The balance of this page has been intentionally left blank.]

EXECUTED under seal as of March __, 2015.

LANDLORD:

KING 773 CONCORD LLC,
By: KING STREET PROPERTIES INVESTMENTS, LLC, its Manager

By: _____
Name: Thomas Ragno
Title: A Manager

TENANT:

WAVE LIFE SCIENCES USA, INC.,
a Delaware corporation

By: _____
Name: _____
Title: _____
Hereunto Duly Authorized

COMMONWEALTH/STATE OF _____

County of _____, ss.

On this ____ day of _____, 2015, before me, the undersigned Notary Public, personally appeared the above-named Thomas Ragno, proved to me by satisfactory evidence of identification, being (check whichever applies): ☐ driver's license or other state or federal governmental document bearing a photographic image, ☐ oath or affirmation of a credible witness known to me who knows the above signatory, or ☐ my own personal knowledge of the identity of the signatory, to be the person whose name is signed above, and acknowledged the foregoing to be signed by him/her voluntarily for its stated purpose, as the a Manager of KING STREET PROPERTIES INVESTMENTS, LLC, acting as Manager of KING 773 CONCORD LLC.

_____
Notary Public
Printed Name: _____
My commission expires: _____

COMMONWEALTH/STATE OF _____

County of _____, ss.

On this ____ day of _____, 2015, before me, the undersigned Notary Public, personally appeared the above-named _____, proved to me by satisfactory evidence of identification, being (check whichever applies): ☐ driver's license or other state or federal governmental document bearing a photographic image, ☐ oath or affirmation of a credible witness known to me who knows the above signatory, or ☐ my own personal knowledge of the identity of the signatory, to be the person whose name is signed above, and acknowledged the foregoing to be signed by him/her voluntarily for its stated purpose, as the _____ of WAVE LIFE SCIENCES USA, INC.

_____
Notary Public
Printed Name: _____
My commission expires: _____

EXIHIBT A

Description of Landlord's Property

LEGAL DESCRIPTION

The land at 733 Concord Street, Cambridge, Middlesex County, Massachusetts, consisting of two parcels of land:

PARCEL1:

Being shown as Lot 7 on Land Court Plan No. 7191U, dated December 3, 1952, a copy of which is filed with the Middlesex South District Registry of the Land Court with Certificate of Title No. 77364.

PARCEL 2:

Being shown as Lot 25 and Lot 29 on Land Court Plan No. 7191-3, dated July 22, 1960, a copy of which is filed with the Middlesex South District Registry of the Land Court with Certificate of Title No. 102747.

TOGETHER with the benefit of rights set forth in a Deed from Jean D. Balkin, dated January 31, 1949, filed with said Registry District as Document No. 227978.

TOGETHER with the right to use the whole of Smith Place shown on said plan in common with others entitled thereto, as to Lots 7 and 29.

TOGETHER with the right to use Lots 10, 11 and 12 shown on a plan filed in Registration Book 516, Page 481, in common with others having like rights therein, said right as appurtenant to Lot 25, being set forth in a Deed from Julia T. Corkery, dated December 28, 1954, filed with said Registry District as Document No. 289672, as to Lot 25.

TOGETHER with the benefit of the right to use the "Way" shown as Lot 26 on a plan filed in Registration Book 643, Page 197, as set forth in a Deed from Haskell Cohn, et als, dated October 10, 1960, filed with said Registry District as Document No. 360534, as to Lot 25.

Being the same premises conveyed to King 733 Concord LLC by Quitclaim Deed dated May 11, 2011, filed with said Registry District as Document No. 1566113 and noted on Certificate of Title No. 248720, Book 1399, Page 99.

EXHIBIT B

Plan of Landlord’s Property

EXHIBIT C

Plan of the Premises

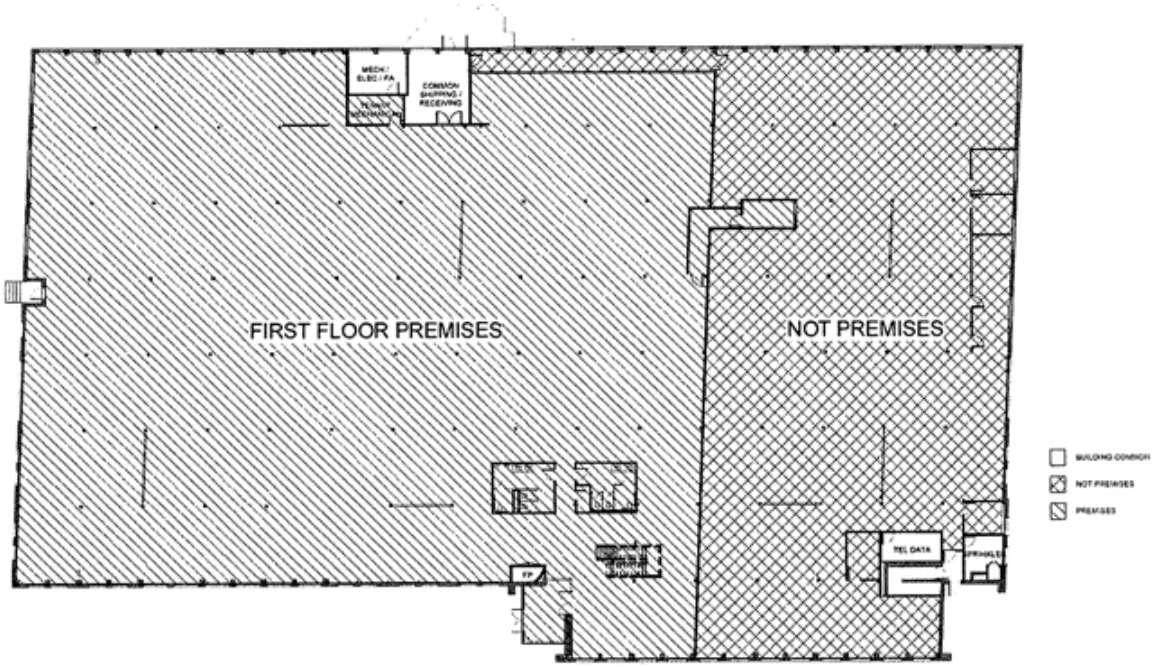

EXHIBIT C-1

Plan of Mezzanine Premises

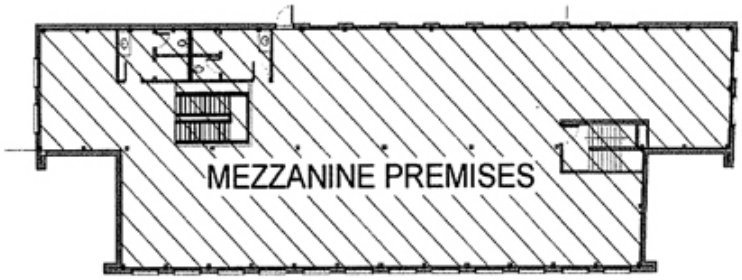

EXHIBIT 11

TENANT WORK INSURANCE SCHEDULE

Tenant shall, at its own expense, maintain and keep in force, or cause to be maintained and kept in force by any general contractors, sub-contractors or other third party entities, as applicable, each required by contract, throughout any period of alterations to the Premises or the Building by Tenant, the following insurance coverages on a primary and non-contributory basis:

(1) Property Insurance. "All-Risk" or "Special" Form property insurance, and/or Builders Risk coverage for major renovation projects, including, without limitation, coverage for fire, earthquake and flood; boiler and machinery (if applicable); sprinkler damage; vandalism; malicious mischief coverage on all equipment, furniture, fixtures, fittings, tenants work, improvements and betterments, business income, extra expense, merchandise, inventory/stock, contents, and personal property located on or in the Premises. Such insurance shall be in an amount equal to the full replacement cost of the aggregate of the foregoing and shall provide coverage comparable to the coverage in the standard ISO "All-Risk" or "Special" form, when such coverage is supplemented with the coverages required above; provided, however, for earthquake and flood coverage, rather than full replacement cost, the coverage shall be in amounts as then commercially available. Property policy shall also include coverage for Plate Glass, where required by written contract.

Builders Risk insurance coverage may be provided by the general contractor on a blanket builders risk policy with limits adequate for the project, and evidencing the additional insureds as required in the Lease.

(2) Liability Insurance. General Liability, Umbrella/Excess Liability, Workers Compensation and Auto Liability coverage as follows:

(a)	General Liability	$1,000,000 per occurrence $1,000,000 personal & advertising injury $2,000,000 general aggregate
(b)	Auto Liability	$1,000,000 combined single limit (Any Auto) for bodily injury and property damage, hired and non-owned cover.
(c)	Workers Compensation Employers Liability	Statutory Limits $1,000,000 each accident $1,000,000 each employee $1,000,000 policy limit

The General Contractor is required to maintain, during the construction period and through completion of construction for the relevant project, a General Liability insurance policy, covering bodily injury, personal injury and property damage, with limits to include a $1,000,000 limit for contractual liability coverage as may be commercially available in standard General Liability insurance policies and adding Landlord and Landlord's managing agent as additional insured as respects the project during construction. Landlord requires a copy of the ISO 20 10 11 85 Additional Insured endorsement or its equivalent, showing Landlord as an additional insured to the General Contractor's policy.

General Contractor shall endeavor to cause any and all sub-contractors with contracts to perform work at the Premises in excess of $25,000 to maintain equal limits of coverage for Workers Compensation/EL, Auto Liability, and primary Commercial General Liability insurance and collect insurance certificates verifying same.

(d)	Umbrella/Excess Liability	$3,000,000 per occurrence $3,000,000 aggregate

Tenant shall require General Contractors' Commercial General Liability/Umbrella insurance policy(ies) include Landlord and Landlord's managing agent as additional insureds, and shall include a primary non-contributory provision.

(3) Deductibles. If any of the above insurances have deductibles or self insured retentions, the Tenant and/or contractor (policy Named Insured), as applicable, shall be responsible for the deductible amount.

All of the insurance policies required in this Exhibit 11 shall be written by insurance companies which are licensed to do business in the State where the property is located, or obtained through a duly authorized surplus lines insurance agent or otherwise in conformity with the laws of such state, with an A.M. Best rating of at least A minus and a financial size category of not less than VII. Tenant shall provide Landlord with certificates of insurance upon request, and prior to commencement of the Tenant/contractor work.

EXHIBIT 12

TENANT'S RIGHT OF FIRST OFFER

1. Definition of ROFO Premises: The "**ROFO Premises**" consist of any portion of the rentable area of the Building which is not included in the Premises initially leased to Tenant. The ROFO Premises are vacant and unencumbered by any leases or occupancy agreements as of the Execution Date of this Lease. Tenant's Right of First Offer shall apply to any portion of the ROFO Premises only after Landlord, in Landlord's bona fide business judgment, determines that such portion of the ROFO Premises will become available for lease to Tenant, i.e.: (i) the term of the lease of Landlord's lease with the initial tenant ("**Initial Tenant**") of such portion of the ROFO Premises will terminate, (ii) the Initial Tenant of such portion of the ROFO Premises (as well as anyone claiming by, through, or under such Initial Tenant) will be vacating the ROFO Premises, and (iii) Landlord intends to offer such portion of the ROFO Premises for lease to a third party. Landlord hereby agrees that the term of the lease of the Initial Tenant of any portion of the ROFO Premises shall, by its terms, expire not earlier than the date three (3) years after the Commencement Date nor later than the date six (6) years after the Commencement Date.

2. Prior Rights in ROFO Premises: The "**Prior Rights in ROFO Premises**" shall be defined as: (i) the right of any tenant of any portion of the ROFO Premises, other than an Initial Tenant, as defined in Section 1 above, to exercise any extension or renewal option under its lease, and (ii) Landlord's right to enter into an agreement, with any tenant of any portion of the ROFO Premises, , other than an Initial Tenant, as defined in Section 1 above, extending or renewing such tenant's lease of such portion of the ROFO Premises, whether or not such tenant's lease contains an extension or renewal option.

3. Conditions to Right of First Offer: Tenant shall be deemed to have failed to satisfy the "**Conditions to Right of First Offer**" if any of the following occur:

(a) Tenant is in default under the Lease beyond any applicable cure periods at the time that Landlord would otherwise deliver an Offer, as hereinafter defined, to Tenant to lease such ROFO Premises; or

(b) more than seventy (70%) percent, in the aggregate, of the rentable floor area of the Premises will be sublet (other than to an Affiliated Entity or (other than to an Affiliated Entity and/or a Successor, as defined in Section 13.7 of the Lease) at the projected commencement date of the term of the Lease with respect to such ROFO Premises; or

(c) the Lease has been assigned (other than to an Affiliated or a Successor) prior to the date Landlord would otherwise deliver the Advice.

4. Procedures Relating to the Offer of each ROFO Premises. Provided that Tenant satisfies all of the applicable ROFO Conditions at the time that Landlord would otherwise be required to provide an Offer, as hereinafter defined, to lease a ROFO Premises to Tenant, Tenant shall have ongoing right of first offer ("**Right of First Offer**") to lease any ROFO Premises when it becomes available for lease to Tenant during the term of the Lease, as it may be

extended. However, Tenant's Right of First Offer shall be subject and subordinate to any Prior Rights in ROFO Premises with respect to such ROFO Premises. At such time as any portion of the ROFO Premises becomes available for lease to Tenant, Landlord shall, prior to offering to lease any ROFO Premises to any third party, give Tenant a written offer ("**Offer**") to lease such portion of the ROFO Premises to Tenant. An Offer shall set forth: (i) a description of the portion of the ROFO Premises in question, (ii) the rental and other economic terms on which Landlord is willing to enter into a lease of such portion of the ROFO Premises with Tenant, (iii) the estimated Term Commencement Date with respect to such portion of the ROFO Premises, (iv) the term of the Lease which would be applicable to such portion of the ROFO Premises, and (v) any other terms applicable to Tenant's demise of such portion of the ROFO Premises.

5. Acceptance of Offer. Tenant shall, within ten (10) business days of its receipt of such Offer, give written notice ("**Tenant's Response**") either: (a) accepting such Offer, or (b) rejecting such Offer. Tenant's failure timely to give a Tenant's Response shall conclusively be deemed to be a rejection of Landlord's Offer. If Tenant does not timely accept such Offer, Tenant shall no further right to lease the ROFO Premises in question, unless:

(i) Landlord does not enter into a lease of such ROFO Premises within nine (9) months ("**Marketing Period**") after the date ("**Rejection Date**") that Tenant either declines to accept such Offer or does not timely respond to such Offer, provided however, that the Marketing Period shall be extended to one (1) year after the Rejection Date if, as of the date nine (9) months after the Rejection Date, Landlord has executed a letter of intent and has prepared a lease and is then in good faith negotiations of such lease with a prospective Tenant of such ROFO Premises, or

(ii) such portion of the ROFO Premises again becomes available for lease to Tenant after the expiration or termination of the term of Landlord's lease with the next tenant ("**Successor Tenant**") to lease such portion of the ROFO Premises (the parties hereby agreeing that, in such event, the term "available for lease to Tenant" shall have the same definition as set forth in Section 1 of this Exhibit 12, except that the Successor Tenant of such portion of the ROFO Premises shall be substituted for the Initial Tenant of such portion of the ROFO Premises.

Tenant must exercise its Right of First Offer with respect to the entirety of the ROFO Premises offered to Tenant.

6. Terms for ROFO Premises. The terms of Tenant's demise of any ROFO Premises shall be upon the terms of the Offer, and upon all of the same terms and conditions of the Lease to the extent not inconsistent with the Offer.

7. Offering Amendment. If Tenant exercises its Right of First Offer, the parties shall execute a confirmatory amendment (the "**Offering Amendment**") reflecting the addition of the ROFO Premises in question to the Premises on the terms set forth above. However, an otherwise valid exercise of the Right of First Offer shall be fully effective whether or not the Offering Amendment is executed.

EXHIBIT 13

TENANT’S EXTERIOR SIGNAGE

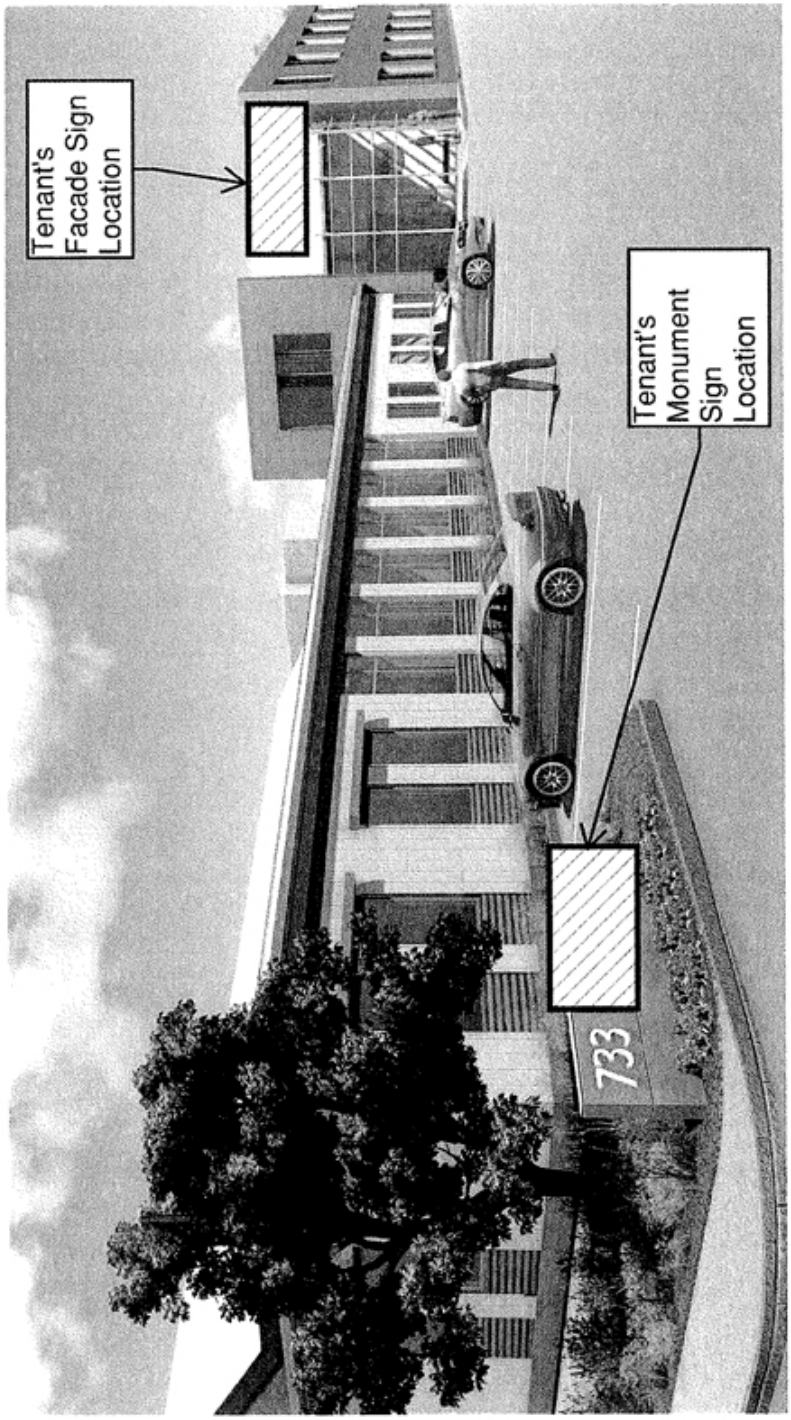

Exhibit 10.8

*****Text Omitted and Filed Separately**
with the Securities and Exchange Commission.
Confidential Treatment Requested
17 C.F.R. Section 200.80(b)(4) and Rule 406 of the
Securities Act of 1933, as amended.

MASTER SPONSORED RESEARCH AGREEMENT

THIS MASTER SPONSORED RESEARCH AGREEMENT ("Master Agreement") is made and effective as of April 1, 2015 (the "Effective Date"), by and between WaVe Life Sciences PTE, Ltd with an office at 419 Western Avenue, Boston, Massachusetts, 02135 ("WaVe"), and The Children's Hospital of Philadelphia, a Pennsylvania non-profit corporation with an office at 34th Street and Civic Center, Philadelphia, Pennsylvania 19104 (together with its affiliates "CHOP"). WaVe and CHOP are each hereafter referred to individually as a "Party" and together as the "Parties."

WHEREAS, WaVe has developed a novel, proprietary chemistry platform that enables the synthesis of high-quality, chirally pure nucleic acid drugs to enhance the therapeutic index of nucleic acid medicines;

WHEREAS, CHOP and its employee, Dr. Beverly Davidson, (the "Principal Investigator" hereunder) have certain expertise, know-how and access to cell and animal models useful to test the efficacy of therapeutic compounds for the potential treatment of Huntington's Disease and other neurodegenerative disorders;

WHEREAS, WaVe desires to sponsor certain research activities in furtherance of the conduct of its business;

WHEREAS, WaVe desires to engage CHOP and CHOP is willing to furnish to WaVe certain Research Activities (as hereinafter defined) in accordance with the terms and conditions set forth in this Agreement.

NOW, THEREFORE, in consideration of the mutual promises and covenants hereinafter set forth, the Parties hereto agree as follows:

1. Research Activities:

CHOP shall perform research activities under this Agreement on a project by project basis. The specific research activities for any given project or projects shall be set forth on one or more "Statements of Work" (each, a "SOW") to collectively form the "Research" that CHOP shall perform and provide to WaVe under this Master Agreement. Each SOW shall contain a detailed description of the research activities that CHOP will perform and provide under such SOW, and if applicable, shall describe any research activities to be allocated to WaVe under such SOW, and the associated compensation, as well as timelines, maximum budgeted amounts, and other relevant project details. Each SOW shall conform in format substantially to the SOW attached hereto as Exhibit A, shall be dated and titled, shall be executed by authorized representatives of both Parties, and shall be attached hereto and incorporated into this Master Agreement. If any provision in a given SOW modifies or conflicts with the terms and conditions contained in this Master Agreement, the language in this Master Agreement shall prevail. Notwithstanding the foregoing, the Parties may agree to modify the terms and conditions of this Master Agreement with respect to a given SOW by setting forth such modifications in such SOW under a section entitled "Modifications to Agreement Terms and Conditions."

Compensation:

2.1. Payment for Research: In full consideration for CHOP's performance of the Research, subject to the other terms of this Agreement, WaVe will pay CHOP for Research in accordance with the terms and conditions for compensation described in the relevant SOW. Unless otherwise provided in the "Modifications to Agreement Terms and Conditions" section of an SOW, payment for Research will be made to CHOP on a [***] basis in [***] days after WaVe's receipt of a detailed invoice from CHOP itemizing all of CHOP's fees, direct costs and indirect costs for Research. CHOP shall not be entitled to any payment by WaVe in excess of the budgeted amounts set forth in the relevant SOW, unless the excess amount has been approved in advance and in writing by WaVe. Invoices will be provided to WaVe on a [***] basis after work is performed. Invoices should be addressed to WaVe at the following address:

Attn: Vice President, Finance
Wave Life Sciences
419 Western Avenue
Boston, MA 02135 (USA)
[***]

2.2. Reimbursable Expenses: In addition to CHOP's compensation, CHOP shall, in accordance with the provisions set forth herein, be entitled to [***] reimbursements for pre-approved travel related expenses reasonably and properly incurred by CHOP in connection with CHOP's performance of the Research ("Reimbursable Expenses"). Reimbursable Expenses may not include any increase, mark up, burden or uplift and must be billed to WaVe at CHOP's actual cost. Subject to WaVe's prior written approval in each instance, Reimbursable Expenses may only include those [***]

3. Confidentiality and Use of Materials:

3.1. Definition: For purposes of this Agreement, "Confidential Information" means all non-public confidential and other proprietary information regarding the business or affairs of WaVe or CHOP disclosed by one party ("Disclosing Party") to the other party ("Receiving Party"), which (i) is in writing marked confidential, or (ii) is identified as confidential at the time of such disclosure and, subsequently, a summary of such information is reduced to writing within thirty (30) days of such disclosure, or (iii) a reasonable person would consider confidential based on the nature of such information and circumstances of such disclosure. Confidential Information includes, without limitation, any information pertaining to products, formulae, specifications, designs, processes, raw materials used and wastes generated, emissions, environmental, health and safety matters, personnel, work conditions, regulatory affairs, inventories, discoveries, inventions, trademarks, patents, manufacturing, packaging, distribution, sales methods, sales, marketing efforts or strategies, expenses, profit figures, customer and supplier lists and costs of goods of the Disclosing Party and related to the Research.

3.2. Exclusions: Confidential Information does not include information that: (i) was already in the possession of Receiving Party before its disclosure by Disclosing Party to Receiving Party as evidenced by Receiving Party's written records, (ii) is independently developed by Receiving Party without reference to any Confidential Information of Disclosing Party as evidenced by Receiving Party's written records, (iii) is or becomes publicly available through no breach of this Agreement by Receiving Party, or (iv) is obtained by Receiving Party from a third party under no obligation not to disclose same.

3.3. Obligations: Receiving Party agrees to maintain, and require its personnel and subcontractors to maintain (if applicable), the confidentiality of the Confidential Information during the term of this Agreement, including any renewal periods, and for a period of five (5) years from the effective termination or expiration date of this Agreement. Neither Receiving Party nor its personnel and subcontractors shall use any such Confidential Information except for the purposes described in this Agreement or as expressly permitted pursuant to any license rights granted hereunder. Notwithstanding the foregoing WaVe may disclose Confidential Information to actual investors, collaborators or acquirers of WaVe or bona fide potential investors, collaborators or acquirers in connection with a due diligence investigation or term sheet submission (collectively "Third Parties"), provided that they are informed of the confidential nature of such information and this Agreement and such Third Parties are bound under written agreements with WaVe by obligations of confidentiality and non-disclosure that are no less restrictive than the obligations upon WaVe hereunder; and that in disclosing Confidential Information to such Third Parties, WaVe does not in any manner indicate or imply an endorsement by CHOP of WaVe's products or services.

3.4. Use of Other Party's Materials: Except only as expressly permitted pursuant to the licenses granted hereunder or pursuant to a license granted to WaVe as the result of the exercise of an Option, neither party shall have the right to use any compounds, biological materials, reagents or assays provided by the owning or providing party to the other party hereunder, other than as stated pursuant to the applicable SOW, and only by the Principal Investigator and persons working under the direct supervision of the Principal Investigator under the SOW in the case of CHOP. All Materials provided by the owning or providing party will be used at all times by the other party in compliance with all applicable federal, state and local laws, regulations and ordinances, and shall be returned or destroyed, with the destruction certified to the owning party, at the written request and discretion of the owning party, following completion of the applicable activities to be conducted by the other party under the SOW. Any Materials provided hereunder by the owning or providing party to the other party are for use solely in non-human, pre-clinical or non-clinical research, and no use shall be permitted in humans or for testing in humans for any purpose whatsoever.

4. Intellectual Property:

4.1. All data and results (the "Results") arising under any SOW hereunder shall be owned by the party (or parties if jointly) which generated such results, subject to the licenses granted to the respective parties under this agreement or to be granted to WaVe pursuant to the exercise of an Option hereunder, subject to the provisions of this Article 4 with respect to the ownership of

Inventions and related patents and intellectual property rights, and all other relevant provisions of this Agreement. CHOP shall provide a Progress Report to WaVe at least quarterly for each SOW under this Agreement, describing in detailed form the Results arising from the Research under the SOW.

It is recognized and understood that the certain existing inventions, know-how and technologies and related patents, patent applications and intellectual property of each party which are existing as of the Effective Date or which are developed or acquired by a party after the Effective Date but outside of the Research conducted under any SOW under this Agreement are the separate property of WaVe or CHOP, respectively ("Background Intellectual Property") and are not affected by this Agreement, and neither party shall have any claims to or rights or licenses in such Background Intellectual Property except only as expressly stated hereunder. Notwithstanding the foregoing, each party shall have a nonexclusive license to use the other party's Background Intellectual Property solely as necessary for the limited purpose of carrying out the research activities that are specifically allocated to such party as expressly stated under a given SOW.

Inventorship shall be determined in accordance with United States Patent Law. The parties each hereby represent, warrant and covenant to the other that all of their employees, agents, consultants, and contractors (and, in the case of CHOP, post-doctoral and other students) participating in the performance of the Research are and shall be obliged pursuant to their terms of employment/retention to assign to such hiring party all of their Inventions and related intellectual property rights arising directly in the performance of the Research.

4.2. CHOP's Property: CHOP shall be the sole owner of any and all inventions, discoveries, know-how, materials, works of authorship (including computer software) and copyrighted materials, whether or not patentable, that are created, conceived, discovered or reduced to practice solely by or on behalf of employees of CHOP pursuant to the performance of Research hereunder, and any patent applications, patents and other intellectual property rights of any kind directed thereto anywhere in the world ("CHOP Intellectual Property").

4.3. WaVe Property: WaVe shall be the sole owner of any and all inventions, discoveries, know-how, materials, works of authorship (including computer software) and copyrighted materials, whether or not patentable, that are created, conceived, discovered or reduced to practice solely by or on behalf of employees of WaVe pursuant to the performance of research activities by WaVe under any SOW under this Agreement which were not conceived and reduced to practice during on-site use of facilities, equipment, funds or other resources of CHOP by WaVe employees where such on-site use at CHOP was not merely a de minimus or incidental use, and any patent applications, patents and other intellectual property rights of any kind directed thereto anywhere in the world ("WaVe Intellectual Property").

4.4. Joint Property: CHOP and WaVe shall be joint owners of any and all inventions, discoveries, know-how, materials, works of authorship (including computer software) and copyrighted materials, whether or not patentable, that are created, conceived, discovered or reduced to practice jointly by or on behalf of employees of CHOP and WaVe, or that were conceived and reduced to practice during on-site use of facilities, equipment, funds or other resources of

CHOP solely by employees of WaVe on-site at CHOP where such on-site use was not merely a de minimus or incidental use, and any patent applications, patents and other intellectual property rights of any kind directed thereto anywhere in the world ("Joint Intellectual Property"). Both CHOP and WaVe agree to execute any documentation necessary to convey and/or formalize the parties' undivided co-ownership rights in the Joint Intellectual Property. Each party shall have the full right to practice and license such Joint Intellectual Property subject only to the similar rights of the other party and subject to the Option rights of WaVe as described herein.

4.5. Disclosure: CHOP agrees to provide WaVe a written disclosure of any CHOP Intellectual Property and any Joint Intellectual Property considered patentable, which disclosure shalt be made in manner consistent with preservation of intellectual property rights. WaVe shall disclose to CHOP any WaVe Intellectual Property and any Joint Intellectual Property considered patentable. Notwithstanding the foregoing, WaVe shall not be required to disclose to CHOP any WaVe Intellectual Property pertaining to any chemical structures or to WaVe's proprietary technology platform or any improvement, enhancement or modification thereto. WaVe agrees to advise CHOP in writing, no later than [***] days after the date of such a disclosure by CHOP, whether it requests CHOP to file and prosecute patent applications related to any such CHOP Intellectual Property and/or Joint Intellectual Property. If WaVe does not request CHOP to file and prosecute any such patent applications, CHOP may proceed with such preparation and prosecution at its own expense. Such patent applications shall be excluded from WaVe's option under Article 5 herein.

4.6. Patent Prosecution: Prior to the time that WaVe exercises its Option to the relevant patent applications, CHOP shall be responsible for, and shall reasonably pursue the preparation of, and shall control the preparation and prosecution of all patent applications and the maintenance of all patents related to CHOP Intellectual Property using counsel of CHOP's sole choosing. CHOP shall be responsible for, and shall reasonably pursue the preparation of, and shall control the preparation and prosecution of all patent applications and the maintenance of all patents related to Joint Intellectual Property using external counsel to be mutually agreed in advance between CHOP and WaVe. WaVe agrees to reimburse CHOP for all documented and reasonable expenses, including, but not limited to, legal fees, filing and maintenance fees or other governmental charges incurred directly in connection with the preparation, filing and prosecution of the patent applications and maintenance of the patents that WaVe requested CHOP to file and prosecute under Section 4.5. WaVe shall reimburse CHOP for expenses under this Section within [***] days of receipt of invoice by CHOP requesting reimbursement. If WaVe declines to reimburse CHOP for the filing, prosecution and maintenance costs in any jurisdiction, CHOP may pay such costs, but such patent applications shall be excluded from WaVe's option under Article 5 hereunder. With respect to the patents that WaVe is reimbursing CHOP for the expenses thereof, CHOP shall furnish copies of any and all such patent applications including any related prosecution documents and all material correspondence with patent offices and all office actions in a timely manner to WaVe and shall provide WaVe a timely and meaningful opportunity to provide input and comment on the prosecution of such cases.

5. Option and License Rights

5.1. In consideration for sponsoring the research hereunder, WaVe shall have a first and exclusive option ("Option") to negotiate in good faith for commercially-reasonable terms for a revenue-bearing license, exclusive or non-exclusive (at the sole discretion of WaVe), under all of CHOP's interest in and to the CHOP Intellectual Property and the Joint Intellectual Property resulting from the research performed hereunder for each SOW hereunder, whether owned solely by the CHOP or jointly with WaVe as set forth above, provided that WaVe pays all costs for the preparation, filing, prosecution and maintenance of patents or other intellectual property protection in the case of an exclusive license sought by WaVe and pays its pro-rata share in the case of a non-exclusive license if WaVe elects to have a non-exclusive instead of an exclusive license. WaVe's Options hereunder shall apply for each SOW, and shall expire 90 days following disclosure of such intellectual property by CHOP to WaVe, it being understood that WaVe shall have multiple Options under this Agreement, with at least one Option applying for each SOW, and, in the case where CHOP discloses arising CHOP Intellectual Property and Joint Intellectual Property in more than one tranche during a SOW, then an Option shall apply for each such disclosure by CHOP under each relevant SOW. WaVe shall have six (6) months from the time it notifies CHOP of its intent to exercise its option to enter into a mutually acceptable license agreement with CHOP, such six month period to be extendable by mutual written agreement of the parties, and CHOP shall negotiate in good faith, the terms of which shall be commercially reasonable and shall reflect then-current, risk-adjusted market rates, which reflect the relevant stage of development of the invention, and the risk-adjusted profitability of likely products, taking into account all relevant development, safety and commercial factors and risks, and consistent with standards of the marketplace current at the time. In addition, where WaVe would be blocked under CHOP Background Intellectual Property, as part of the Option right, WaVe shall have the right to acquire from CHOP, to the extent CHOP may convey such interests, and to include under the Option, a license for commercial purposes under the relevant blocking CHOP Background Intellectual Property solely to the extent necessary for WaVe to further develop and commercially exploit products resulting from the CHOP Intellectual Property and Joint Intellectual Property being licensed pursuant to the relevant Option exercise. In addition, the parties understand and agree that the non-exclusive licenses set forth in this section below shall remain perpetual in the event of termination of any license resulting from Option exercise, or the failure of the parties to enter into a definitive license as a result of any Option exercise. Regardless of whether a given Option is exercised or declined by WaVe, WaVe hereby grants to CHOP a fully-paid and royalty-free, non-exclusive license to use the WaVe Intellectual Property (as the case may be) and the Results arising under any SOW, but not any WaVe Background Intellectual Property, for any of CHOP's internal academic research purposes. For the avoidance of doubt, such non-exclusive license shall not include the right to transfer or provide any WaVe proprietary Materials to any third party, or to use with or for the benefit of any third party any WaVe Intellectual Property pertaining to any chemical structures or to WaVe's proprietary technology platform or any improvement, enhancement or modification thereto. Regardless of whether a given Option is exercised or declined by WaVe, CHOP hereby grants to WaVe, a fully-paid and royalty-free nonexclusive, worldwide license to use the CHOP Intellectual Property and the Results arising under any SOW, but not any CHOP Background Intellectual Property, for any of WaVe's research purposes, which shall include use with any third party collaborator or contractor in furtherance of WaVe's research purposes.

5.2. Federal Government Rights. Any license granted to WaVe pursuant to Article 5.1 hereof shall be subject, if applicable, to the rights of the United States government reserved under Public

Laws 96-517, 97-256 and 98-620, codified at 35 U.S.C. 200-212, and any regulations issued thereunder as may be amended from time to time. Any right granted in this Agreement greater than that permitted under applicable Federal law and policy shall be modified as may be required to conform to such Federal law or policy.

6. Representations and Warranties:

6.1 CHOP hereby represents, warrants and covenants that the Research, and its performance thereof, will comply with all applicable federal, state and local laws, requirements and regulations. In addition, CHOP hereby represents and warrants that it has not been notified in writing by any third party of any pending or ongoing legal action or legal proceeding alleging that any of the CHOP Background Intellectual Property to be used under any particular SOW infringes or would infringe the intellectual property rights of any third party if used as contemplated under such SOW. In the event that CHOP receives any such notice from a third party, CHOP shall immediately notify WaVe in writing.

6.2. CHOP hereby represents, warrants and covenants that CHOP, and CHOP's employees and/or subcontractors assigned to perform the Research, has and will at all times during the Research have the requisite expertise and all rights, licenses, permits and consents necessary to perform the Research hereunder and that CHOP and CHOP's employees and/or subcontractors are fully qualified and equipped to perform Research.

6.3. CHOP hereby represents, warrants and covenants that to the best of CHOP's knowledge the terms of this Agreement do not violate and will not cause a breach of the terms of any other agreement or, to CHOP's knowledge, any applicable laws, decrees or regulations, to which CHOP is a party or by which it is subject or bound, and that it has not granted and will not grant any rights or licenses to any third party that would conflict with or otherwise restrict the Option rights of WaVe, or the license rights granted or to be granted pursuant to the Option rights hereunder.

6.4. CHOP hereby represents, warrants and covenants on behalf of its employees working on any SOW that it has not been convicted of an offense related to any federal or state health care program and that it has not been debarred, excluded or is otherwise ineligible for federal program participation as of the Effective Date and that CHOP shall promptly notify WaVe in writing if any of these events occurs.

7. Term and Termination:

7.1. Term: Subject to Sections 7.2 and 7.3 hereof, this Agreement shall commence on the Effective Date and shall remain in effect until the later of a period of five (5) years or until the date that the Research Activities under the last SOW are completed hereunder, unless terminated earlier in accordance with this Section 7.

7.2. Termination by CHOP: CHOP may terminate this Agreement and any SOW hereunder for WaVe's material breach of this Agreement. WaVe shall have thirty (30) days to cure such breach after CHOP provides written notice to WaVe describing with particularity the alleged material breach by WaVe. If WaVe has not cured such a material breach of this Agreement within thirty (30) days' of receiving such written notice, this Agreement will terminate.

7.3. Termination by WaVe: WaVe may terminate a given SOW upon thirty (30) days prior written notice to CHOP or this Agreement in its entirety at any time for any reason or no reason at all upon thirty (30) days prior written notice to CHOP. In addition, WaVe may terminate a given SOW or this Agreement in its entirety effective immediately upon written notice if, in WaVe's sole opinion, (i) CHOP is unable to perform the Research, (ii) CHOP has materially breached this Agreement and failed to cure the breach within thirty (30) days of receiving written notice of such breach, (iii) the performance of this Agreement by either Party would be in violation of any federal, state or local laws, requirements or regulations, or (iv) CHOP makes a general assignment for the benefit of its creditors, or a petition in bankruptcy is filed by or against CHOP, or a receiver shall be appointed on account of CHOP's insolvency.

7.4. Compensation upon Termination: Upon any termination of a given SOW or this Agreement, WaVe's obligations to CHOP shall be to pay CHOP for Research rendered and expenses incurred which are non-cancellable or non-avoidable prior to the effective date of termination of such SOW or this Agreement in accordance with Section 7.3 above. Upon any termination of a given SOW or this Agreement in its entirety, CHOP's obligations to WaVe shall be to continue to provide the Research to WaVe until the effective date of such termination (except to the extent otherwise instructed in writing by WaVe), to wind down and terminate the Research in an efficient and cost-effective manner and, in connection with any termination or expiration of this Agreement, to destroy or return to WaVe all copies of all materials, data, work product, reports and all other property of WaVe under this Agreement, provided however, CHOP may retain one copy of WaVe Confidential Information for purposes of monitoring its obligations hereunder.

8. Notices:

Except as otherwise provided, all notices provided under this Agreement (i) shall be in writing, referencing this Agreement, (ii) shall be deemed to have been given five (5) calendar days from the date of postmark if sent by certified mail or on the date of delivery if transmitted by courier or on the date of transmission if sent by facsimile and (iii) shall be delivered personally or sent to the following addresses by certified mail, return receipt requested, overnight courier, or telecopier with telephone confirmation of transmission:

WaVe:
WaVe Life Sciences, Inc.
ATTN: Chief Executive Officer
Wave Life Sciences
419 Western Avenue
Boston, MA 02135 (USA)
[***]

With a copy to:
Vice President, Business Development
Wave Life Sciences
419 Western Avenue
Boston, MA 02135 (USA)
[***]

CHOP: The Children's Hospital of Philadelphia
Colket Translational Research Building Suite 2200
Philadelphia, Pennsylvania 19104
Attention: Director, Technology Transfer
Telephone: 267-426-7400
Fax: 215-590-5484

9. Indemnification and Insurance:

9.1. Indemnification: CHOP shall promptly indemnify, defend and hold harmless WaVe and WaVe's directors, officers, employees, agents and affiliates from and against any and all third party claims, suits, actions, damages, expenses, costs, fees (including reasonable attorney's fees) and liabilities for any injury or damage to the extent arising out of or in connection with CHOP's negligence or willful misconduct in the performance of Research under this Agreement, except to the extent any such claims, suits, actions, damages, expenses, costs, fees or liabilities result solely from WaVe's negligence or willful misconduct. The indemnification obligations in this paragraph shall survive any termination of this Agreement.

9.2. WaVe shall promptly indemnify, defend and hold harmless CHOP and CHOP's directors, trustees, officers, employees, medical staff, research staff, agents and affiliates from and against any and all third party claims, suits, actions, damages, expenses, costs, fees (including reasonable attorney's fees) and liabilities for any injury or damage arising out of or in connection with (i) WaVe's use of the Results of such Research, or (ii) the material breach of the Agreement or any applicable SOW by WaVe, and/or (iii) WaVe's acts or omissions in connection with this Agreement constituting negligence or willful misconduct, except to the extent any such claims, suits, actions, damages, expenses, costs, fees or liabilities result solely from CHOP's negligence or willful misconduct. The indemnification obligations in this paragraph shall survive any termination of this Agreement.

9.3. Insurance Requirements:

During the term of this Agreement, both parties will obtain and maintain, at its own expense, the following coverage.

Commercial General Liability: The parties shall maintain commercial general liability coverage or program of self-insurance with limits no less than [***] U.S. Dollars [***] per occurrence and [***] U.S. Dollars [***] in the aggregate.

a) Workers' Compensation Coverage: Both parties shall maintain statutory limits and Employers Liability limits.

b) Certificate of Insurance: Upon written request, of a party, such party shall provide the other party with its certificate of insurance evidencing the insurance coverage set forth

in this Section. Each party shall provide to the other party, at least [***] days prior written notice of any cancellation, non-renewal or material change, if any, of such insurance coverage.

10. Publication:

It is recognized and understood that one of CHOP's primary missions is the timely dissemination of research information to the academic research community for clinical and educational purposes. It is further recognized and understood that in furtherance of this mission, CHOP desires the right to publish or present information related to the subject matter of the Research hereunder. The parties expect to consult and coordinate on the publication strategy for publications resulting from the Research, and to recognize the contributions of each party to the Research as appropriate. Prior to publishing the chemical structure of any proprietary compounds from WaVe or which are covered by the patent or patent application claims of any WaVe Background Intellectual Property, CHOP shall consult with WaVe and obtain the consent of WaVe prior to publishing any such chemical structures. Subject to the foregoing, CHOP shall have such publication and presentation privileges, provided manuscripts of a publication or presentation are submitted to WaVe for review prior to submission for publication or presentation. Other than as expressly stated above with regard to chemical structures, no right of manuscript, abstract, or presentation approval by WaVe is implied by this provision. CHOP shall submit to WaVe a copy of any proposed publication or presentation at least [***] days prior to submission for publication or presentation. If no response is received within [***] days of the date submitted to WaVe it will be conclusively presumed that the publication or presentation may proceed without delay. If WaVe determines that the proposed publication or presentation contains any Confidential Information of WaVe or any patentable subject matter which requires protection, WaVe may require the delay of the publication or presentation for a period of time not to exceed [***] additional days for the purpose of redacting such Confidential Information of WaVe and for filing patent applications.

11. Miscellaneous:

11.1. Assignment: Neither party shall assign or delegate this Agreement or any of such party's rights or obligations hereunder without the prior written consent of the other party provided, however, either party may without such consent assign this Agreement to an affiliate or in connection with the sale or transfer of all or substantially all of its business to which this Agreement relates or in connection with a merger or other consolidation with another entity provided no such assignment shall relieve the assigning party of its obligations hereunder if such assignee defaults materially in its performance of its obligations hereunder.

11.2. Independent Contractor: CHOP acknowledges and agrees that it is engaged as an independent contractor and not as an employee, agent, partner or joint employer of WaVe. CHOP further acknowledges that any workers and/or consultants it assigns to WaVe are employees of CHOP and not of WaVe. CHOP assumes sole and full responsibility for withholding any and all appropriate taxes, and for complying with any federal, state and local employment laws and ordinances including, but not limited to, workers compensation, unemployment insurance, and wage and hour laws. CHOP shall also verify the identity and work authority of each worker and/or consultant under the United States immigration laws.

11.3. Waiver: The failure of either Party hereto to enforce at any time any of the provisions or terms of this Agreement, or any rights in respect thereof, or the exercise of or failure to exercise by either Party any rights or any of its elections herein provided, shall in no way be considered to be a waiver of such provisions, terms, rights or elections or in any way to affect the validity of this Agreement.

11.4. Severability: If any of the provisions of this Agreement are held invalid or unenforceable, unless such invalidity or unenforceability substantially frustrates the underlying intent and sense of the remainder of this Agreement, such invalidity or unenforceability shall not affect the remainder of this Agreement.

11.5. Conflicts: CHOP shall reasonably avoid all conflicts of interest in performing the Research.

11.6. Governing Law: This Agreement and the performance of all obligations hereunder shall be governed by and construed in accordance with the laws of the Commonwealth of Pennsylvania, without reference to its choice of laws principles.

11.7. Entire Agreement: This Agreement constitutes the entire agreement between WaVe and CHOP and supersedes any and all other agreements and understandings between WaVe and CHOP, whether oral or written, with respect to the subject matter hereof. This Agreement shall not be modified or amended in any manner except by a writing signed by authorized representative of both Parties. This Agreement shall be binding upon and inure to the benefit of the parties and their respective successors and permitted assigns.

11.8. Publicity: Neither party shall use the name, nickname, initials, trademark, trade dress, logo, symbol or other uniquely identifying term, mark or symbol of the other party or the Investigator in publicity or advertising involving this Agreement or otherwise without the other party's prior written consent, except as may be required by law and provided that CHOP shall be free to list the name of WaVe as required for publication in a scientific journal and as required on grant applications.

11.9. Survival: Sections 3, 4, 5, 7, 8, 9, 10 and 11.2, 11.3, 11.5, 11.7, 11.8, 11.9 and 11.10 shall survive the termination or expiration of this Agreement for any reason, in accordance with the respective terms and conditions stated therein, and for the duration stated therein, and where no duration is stated, shall survive indefinitely.

11.10. Interpretation: This Agreement is the product of negotiation between the parties and shall not be interpreted for or against either party.

11.11. Headings: Article and Section headings are for reference purposes only and shall not be considered in the construing of this Agreement.

11.12. Counterparts: This Agreement may be signed in one (1) or more counterparts, each of which will be deemed an original but all of which together will constitute one and the same instrument.

IN WITNESS WHEREOF, and intending to be legally bound hereby, the Parties have executed this Agreement by their duly authorized representatives as of the Effective Date. The persons executing this Agreement represent and warrant that they have the full power and authority to enter into this Agreement on behalf of the persons or entities they are signing on behalf of below.

The Children's Hospital of Philadelphia		WaVe Life Sciences Pte. Ltd.	
By:	/s/ Mary Tomlinson	By:	/s/ Paul B. Bolno
Name:	Mary Tomlinson	Name:	Paul Bolno
Title:	SVP, Research Administration	Title:	President & CEO

SAMPLE ONLY

EXHIBIT A

STATEMENT OF WORK
Title

This Statement of Work ("SOW"), effective **[Month, Date, Year],** submitted in connection with the CHOP/Research Agreement by and between **WaVe Sciences PTE, Ltd.** and **The Children's Hospital of Philadelphia,** effective **[Month, Date, Year' ("Agreement"),** is hereby agreed to by the Parties.

Pursuant to Section I of the Agreement, this SOW **[IF APPLICABLE ADD: and the attached appendix(es)]** shall be governed by the terms and conditions of the Agreement and any modifications thereto that are agreed to by the Parties and set forth in this SOW under the section below, entitled "Modifications to Agreement Terms and Conditions." *Any such modifications shall apply only to this SOW, and not to any previous or subsequent SOWs, unless expressly stated otherwise in such other SOW.* All other terms and conditions of the Agreement shall remain in full force and effect.

The Children's Hospital of Philadelphia		**WaVe Life Sciences PTE, Ltd.**	
By:	_____	By:	_____
Name:	_____	Name:	_____
Title:	_____	Title:	_____

Modifications to Agreement Terms and Conditions

None.

Research Activities

CHOP shall perform and provide the following Research to WaVe:

ALTERNATIVELY, INSERT: CHOP shall provide the Research as set forth in Appendix 1, attached hereto and incorporated herein by this reference.

[Insert a Schedule/Term]

Term: , 2015 - , 201 , unless terminated earlier pursuant to Section 6 of the Agreement.

*****Confidential Treatment Requested*****

Compensation/Budget

WaVe shall compensate CHOP for the Research as follows: . **ALTERNATIVELY,**

INSERT: WaVe shall compensate CHOP for the Research as set forth in Appendix 1, attached hereto and incorporated herein by this reference.

Total compensation under this SOW shall not exceed ($) without the prior written consent of WaVe.

Exhibit 10.9

*****Text Omitted and Filed Separately with the Securities and Exchange Commission. Confidential Treatment Requested 17 C.F.R. Section 200.80(b)(4) and Rule 406 of the Securities Act of 1933, as amended.**

THIS AGREEMENT dated March , 2015 is made **BETWEEN:**

(1) **THE CHANCELLOR, MASTERS, AND SCHOLARS OF THE UNIVERSITY OF OXFORD**, whose administrative offices are at University Offices, Wellington Square, Oxford 0X1 2JD, England and its Affiliates ("the University"); and

(2) **WAVE LIFE SCIENCES, PTE. LTD**, a company registered under the laws of Singapore, with corporate offices at 419 Western Avenue, Boston MA 02135 ("the Sponsor")

1. **DEFINITIONS**

In this Agreement the following expressions have the meaning set opposite:

Academic Publication:	the publication of an abstract, article or paper in a journal or an electronic repository; its presentation at a conference or seminar; or press release or other public announcement; and in clauses 5 and 6 "to Publish" and "Publication" are to be construed accordingly;
Affiliate:	with respect to any Party, any other person or entity which directly or indirectly controls, is controlled by, or is under common control with, such Party. A person or entity, such as a corporation, partnership, limited liability company, trust, business trust, association, joint venture, non-profit organization, or university shall be regarded as in control of another Party if it owns, or directly or indirectly controls, at least fifty percent (50%) of the voting stock or other ownership interest of such Party, or if it directly or indirectly possesses the power to direct or cause the direction of the management and policies of a Party by any means whatsoever;
this Agreement:	this document, including its Schedules, as amended from time to time in accordance with clause 10.9;
Background Information, Materials & IP:	(i) information, data, techniques, Know-how, software and Materials that are owned or controlled by a Party (regardless of the form or medium in which they are disclosed or stored) and that are provided by such Party to the other for use in the Project during the Project Period, whether existing before or after the date of this Agreement and (ii) Intellectual Property that is owned or controlled by a Party prior to carrying out the Project or is conceived, developed or first reduced to practice by a Party independently of the Project and provided by such Party for use in the Project during the Project Period.

a Business Day:	Monday to Friday (inclusive) except bank or public holidays in England and the United States;
Confidential Information:	any (i) Background Information, Materials & IP disclosed by a Party to the other for use in the Project and identified as confidential before or within [***] days of the time of disclosure; (ii) Research Reports; and (iii) Results;
the Effective Date:	1 April 2015;
the Financial Contribution:	the financial contribution to be provided by the Sponsor set out in Schedule 1;
the Good Data Management Practices:	the practices and procedures sat out in Schedule 3;
Intellectual Property:	patents, trademarks, service marks, registered designs, copyrights, database rights, design rights, confidential information, trade secrets, applications for any of the above, and any similar right recognised from time to time in any jurisdiction, or other rights issuing from, or filed subsequent to the date of this Agreement, based on or claiming priority to or from the applications, patents, and rights listed above, including but not limited to continuations, continuations in part, divisionals, reexaminations, extensions, reissues, substitutions, renewals, supplementary protection certificates, registrations, and confirmations of any of the foregoing, and any patents resulting from any such application or right, together with all rights of action in relation to the infringement of any of the above;
Inventions:	Any data or information, processes, compositions of matter, learnings, improvements and Know-how, whether or not patentable, conceived or reduced to practice by any Party in the course of performing the Project that may be used in support of or as the basis or foundation for Intellectual Property;
the Key Personnel:	the Principal Investigator and any other key personnel identified in Schedule 2;

Know-how:	unpatented technical information including, without limitation, information relating to inventions, discoveries, concepts, methodologies, models, research, development and testing procedures, the results of experiments, tests and trials, manufacturing processes, techniques and specifications, quality control data, prototypes, analyses, reports and submissions, trade secrets, in all cases whether or not patentable and that is not in the public domain, and specifically, without limiting the foregoing: (i) data and information relating to the engineering, design or manufacture of stereo-controlled or stereo-pure nucleic acid based molecules; (ii) the general chemical stability, metabolism, pharmacokinetic or pharmacodynamics effect of stereo-controlled or stereo-pure nucleic acid based molecules; and (iii) the use of stereo-controlled or stereo-pure nucleic acid based molecules to treat disease;
the Location:	the location(s) at which the Project will be carried out as set out in Schedule 2;
Materials	proprietary original material, progeny (every descendant from the Material), derivatives (a functional subunit of Material), any substance expressed by or from Material and modifications (substances created by the Recipient which contain or incorporate Material or through use of Material), or any chemical compound derivatives, modifications and improvements, fragments or portion thereof and associated Know-how, information and data provided by the Sponsor to the University under this Agreement, including but not limited to rationally designed stereo-controlled or stereo-pure nucleic acid based molecules
Party:	The Sponsor or the University are each referred to as a “Party” or collectively as the “Parties”;
the Principal Investigator:	Prof Mathew Wood or his or her successor appointed under clause 9.2;
the Project:	the programme of work described in Schedule 2, as amended from time to time in accordance with clause 10.9;
the Project Period:	the period described in clause 2.1;
the Results:	all (i) data, information, Know-how, Inventions or learnings first generated or resulting from the

Project, including underlying data, observations, theses, hypotheses and conclusions drawn therefrom and (ii) Intellectual Property conceived, developed, identified or first reduced to practice or writing in the course of the Project;

the Sponsor's Supervisor: Chandra Vargeese, Ph.D.

2. **THE PROJECT**

2.1 The Project will begin on the Effective Date and will continue until for a period of eighteen (18) months or until any later date agreed in writing between the parties, or until this Agreement is terminated in accordance with clause 8 or 9.

2.2 Each of the parties will carry out the tasks allotted to it in Schedule 2, and will provide the human resources, materials, facilities and equipment that are designated as its responsibility in Schedule 2. The Project will be carried on under the direction and supervision of the Sponsor's Supervisor. The Project will be carried out at the Location.

2.3 Each of the parties will use all reasonable endeavours to obtain all regulatory and ethical licences, consents and approvals necessary to allow it to carry out the tasks allotted to it in Schedule 2.

2.4 Each of the parties will ensure that its employees and students (if any) involved in the Project: (i) observe the conditions attaching to any regulatory and ethical licences, consents and approvals; (ii) keep complete and accurate records of all research, development and other work carried out in connection with the Project and of all Results and observations, signed by the people who obtained each Result or made those observations, and countersigned by an employee of that Party who is not a member of the research team but who understands the work; and (iii) comply with the Good Data Management Practices.

2.5 Although each of the parties will use reasonable endeavours to carry out the Project in accordance with Schedule 2, neither Party undertakes that any research will lead to any particular result, nor does it guarantee a successful outcome to the Project.

2.6 The University will keep the Sponsor advised of the progress of the Project and will provide the Sponsor with reports as it reasonably requests from time to time, but on no less than a monthly basis. Such reports may be in email format and shall summarise the progress of the Project and detail the Results (each such report an "Interim Report"). Within [***] days following completion of the Project, the University agrees to furnish the Sponsor with a formal written report setting forth all the Results generated in performing Project ("Final Report"). Such Interim Reports and the Final Report shall be collectively referred to as the "Research Reports" and the Research Reports shall be Confidential Information under this Agreement. The University shall use its best efforts to ensure that the Research Reports include a clear, detailed and accurate description of the Results and include sufficient detail (when viewed collectively) to adequately support patent applications relating to any Inventions. During the Project Period, the Principal Investigator and the Sponsor's Supervisor and other representatives of the Parties as required will meet at times

(but no less than quarterly) and places mutually agreed upon, including by teleconference, with the purpose of reviewing the progress and Results, as well as ongoing plans, changes or amendments to the Project and identifying any Inventions arising from the collaboration.

2.7 Each of the parties warrants to the other that it has full power and authority under its constitution, articles of association, by-laws, or other operating documents, and has taken all necessary actions and obtained all authorisations, licences, consents and approvals, to allow it to enter into this Agreement.

3. FINANCIAL CONTRIBUTION AND EXTERNAL FUNDING

3.1 The University will keep complete and accurate accounts of its expenditure on the Project. The Sponsor will pay the Financial Contribution to the University in accordance with Schedule 1 within [***] days after receipt by the Sponsor of [***] invoices. Where the Financial Contribution is being claimed against costs and expenses incurred by the University, each invoice must be accompanied by a statement certified by an authorised officer of the University.

3.2 All amounts payable to the University under this Agreement are exclusive of VAT (or any similar tax) which the Sponsor will pay at the rate from time to time prescribed by law.

3.3 If the Sponsor fails to make any payment due to the University under this Agreement, without prejudice to any other right or remedy available to the University, the University may charge interest (both before and after any judgement) on the amount outstanding, on a daily basis at the rate of [***] per cent ([***]%) per annum above the London Interbank Offer Rate from time to time in force. That interest will be calculated from the date or last date for payment to the actual date of payment, both dates inclusive, and will be compounded annually. The Sponsor will pay that interest to the University on demand.

3.4 Except as set out in Schedule 2, the University will own all equipment purchased or constructed by it, or for it, using the Financial Contribution.

4. USE AND EXPLOITATION OF INTELLECTUAL PROPERTY

4.1 Each Party shall disclose Background Information, Materials & IP owned or controlled by it to the Project that it believes is reasonably required to enable or further the Project. This Agreement does not affect the ownership of any (i) Background Information, Materials & IP or (ii) technology, design, work, invention, software, data, technique, Know-how, or materials that are not Results and, accordingly, the Parties hereto agree that all right, title and interest in the Background Information, Materials & IP of each Party will remain the property of each such Party (or its licensors, as applicable). No licence to use any Background Information, Materials & IP or any other Intellectual Property is granted or implied by this Agreement except the rights expressly granted in this Agreement.

4.2 Each Party grants the other a limited, royalty-free, fully paid, non-exclusive licence to use its Background Information, Materials & IP for the purpose of carrying out the Project during the Project Period, but for no other purpose. Neither Party may grant any sub-licence to use the other's Background Information, Materials & IP except

that the Sponsor may allow its Affiliates and any person or entity working for or on behalf of the Sponsor or its Affiliates to use the University's Background Information, Materials & IP for the purpose of carrying out the Project.

4.3 The University shall not duplicate or reverse engineer the Materials provided by the Sponsor pursuant to the Project or disseminate the Materials to any third party. The University agrees that persons who may have access to the Material shall be limited to its Principal Investigator and his direct reports. The University shall not use the Material for diagnosing, testing in or treatment of human subjects. The University shall comply with all applicable laws and regulations applicable to the handling, use and disposal of the Material. Any Material remaining upon completion of the Project shall either be returned to the Sponsor or discarded consistent with Sponsor's written instructions and applicable laws and regulations.

4.4 The Sponsor will own the Results and may take such steps as it may decide from time to time, and at its own expense, to register and maintain any protection for Intellectual Property included in or arising or derived from the Results, including filing and prosecuting patent applications for any of the Inventions included in the Results, in each case without additional compensation or consideration to the University. Where a third party such as a student or contractor is involved in the Project, the University or the Party engaging that contractor (as the case may be) will ensure that the student and the contractor assign any Intellectual Property they may have in the Results in order to be able to give effect to the provisions of this clause 4. The University will ensure that its employees and students involved in the creation of the Results give the Sponsor such assistance as the Sponsor may reasonably request in connection with the registration and protection of the Intellectual Property in the Results, including filing and prosecuting patent applications for any Inventions included in the Results, and taking any action in respect of any alleged or actual infringement of the resulting Intellectual Property. To this end, the University represents, warrants and covenants that the Principal Investigator and its students, contractors and employees that may have access to the Results are, or will be, subject to written and enforceable intellectual property invention assignment agreements with the University or written and enforceable University policies that vest the ownership of the Results in the University. Accordingly, for good and valuable consideration, the receipt of which is hereby acknowledged, the University will assign and does hereby irrevocably assign all of its rights, title and interest to the Results, including any Intellectual Property included in or arising or derived from the Results, to the Sponsor. The University shall cooperate in good faith with Sponsor and shall take all measures and execute all documents as are necessary to assign all of its right, title and interest to the Sponsor, and perfect title solely in the name of Sponsor, for all of the Intellectual Property pertaining to the Results, and to facilitate the filing, prosecution, defence and enforcement of all such Intellectual Property by the Sponsor, at Sponsor's sole cost.

4.5 The University will notify the Sponsor promptly after identifying any Results that the University believes may constitute Inventions, and will supply the Sponsor with copies of such Results. The University will notify other Results to the Sponsor in the reports provided under clause 2.4 and the Research Reports 2.6. The University will not file any patent applications relating to the Results and hereby covenants that if it does, it will irrevocably assign and hereby irrevocably assigns such patent applications to the Sponsor for no additional consideration.

4.6 The Sponsor grants the University a royalty-free, non-exclusive licence to use the Results for the purpose of carrying out the Project, but for no other purpose. The University may not grant any sub-licence to use the Results. Upon the completion of the Project, the license granted to the University under this clause 4 shall automatically and immediately terminate except as otherwise specifically stated herein.

4.7 Despite the assignment or agreement to assign under clause 4.4, the University, its employees and students will have the irrevocable, royalty-free right to use the Results for the purposes of the University's own internal academic teaching and other scholarly uses that are undertaken for the sole purpose of education and academic research. Notwithstanding the foregoing, the rights in this clause are subject to the rules on Academic Publication in clause 5 and confidentiality in clause 6. For clarity, such Academic and Research Purposes shall not extend to the use of the Results in collaboration with any for-profit or commercial third party where such party would be granted any (i) rights to commercially exploit the Results in any way; nor (ii) access to any of the Sponsor's Background Information, Materials & IP or the Research Reports.

4.8 The Sponsor will provide the University with such information as the University may reasonably request from time to time to demonstrate that the Sponsor is exploiting or is taking reasonable steps towards exploiting the Results. If the Sponsor does not demonstrate that it is exploiting any of the Results or is taking reasonable steps towards exploiting them, then the Sponsor may, in its discretion, elect to abandon any patent applications or issued patent included in the Intellectual Property arising or derived from any Invention included in the Results (the "Abandoned IP"). Following such abandonment, the University shall have the right, but not the obligation, to commence or continue such prosecution and to maintain any such patent or patent application under its own control and at its own expense and such patent or patent application shall thereafter be excluded from the definition of Results for purposes of this Agreement. Prior to any such abandonment, the Sponsor shall give the University at least [***] notice and a reasonable opportunity to take over prosecution of such patent or patent application. The Sponsor agrees to cooperate in such activities including execution of any documents necessary to enable University to retain ownership and control of such patent or patent application and, if necessary, will assign, and hereby assigns, all of its rights and interest to such Abandoned IP to the University.

5. ACADEMIC PUBLICATION

5.1 Subject to clause 5.2 an employee or student of the University (whether or not involved in the Project) may, provided a Confidentiality Notice under clause 5.2 has not been given:

5.1.1 Discuss work undertaken as part of the Project in University seminars, tutorials and lectures; and

5.1.2 Publish the Results, including any Background Information, Materials & IP of the Sponsor (unless it is the Sponsor's Confidential Information) in support of the Results.

5.2 The Sponsor and the University anticipate that a high impact academic Publication will arise following the successful conduct of the Project, and nothing in this Agreement shall prevent or hinder the University from seeking to publish such a Publication, provided that the procedure in this clause 5.2 is followed. The University will submit to the Sponsor, in writing, a copy of the proposed Publication at least [***] days before the date of the proposed submission for Publication. The Sponsor may, by giving written notice to the University ("a Confidentiality Notice"):

(a) require the University to delay the proposed Publication for a maximum of [***] months after receipt of the Confidentiality Notice if, in the Sponsor's reasonable opinion, that delay is necessary in order to seek patent or similar protect on for any of the Sponsor's Background Information, Materials & IP or any Results that are to be Published; or

(b) prevent the Publication of any of the Sponsor's Background Information, Materials & IP that is Confidential Information. For the avoidance of doubt the University shall not publish the full stereochemical and chemical structure of any of the Sponsor's Background Information, Materials & IP without the prior written consent of the Sponsor, provided that the Sponsor will consent to the University disclosing in a Publication sufficient information about the nature of the Sponsor's Background Information, Materials & IP and the potential use of the same in the treatment of Muscular Dystrophy as would ordinarily be required of a high quality academic Publication.

The Sponsor must give that Confidentiality Notice within [***] days after the Sponsor receives a copy of the proposed Publication. If the University does not receive a Confidentiality Notice within such [***] day period, its employee or student may proceed with the proposed Publication, provided that, whether or not a Confidentiality Notice has been given, any of the Sponsor's Background Information, Materials & IP that is Confidential Information may not be published.

6. CONFIDENTIALITY

6.1 Subject to clause 5, neither Party will disclose to any third party, nor use for any purpose except carrying out the Project, any of the other Party's Confidential Information.

6.2 Neither Party will be in breach of any obligation to keep any Background Information, Materials & IP, Results or other information confidential or not to disclose it to any third party to the extent that it:

6.2.1 was known to the Party making the disclosure before its receipt from the other Party, as demonstrated by written records or other tangible documentation, and is not otherwise subject to an obligation of confidentiality to the other Party;

6.2.2 is, as of the date of this Agreement, in the public domain, or subsequently enters the public domain through no fault of the receiving Party

6.2.3 has been obtained by the Party making the disclosure from a third party in lawful possession of such information in circumstances where the Party making the disclosure has no reason to believe that there has been a breach of an obligation of confidentiality owed to the other Party;

6.2.4 is independently developed by the Party making the disclosure as demonstrated by written or other tangible evidence without reference to or benefit of information disclosed to it by the other Party;

6.2.5 is disclosed pursuant to the requirement of any law or regulation (provided, in the case of a disclosure under the Freedom of Information Act 2000, none of the exceptions to that Act applies to the information disclosed) or the order of any court of competent jurisdiction, and the Party required to make that disclosure has informed the other of the requirement and the information required to be disclosed, provided, however, that:

(a) in the event that either Party hereto is required by applicable statute or regulation or by judicial or administrative process to disclose any part of the Confidential Information which is disclosed to it hereunder pursuant to this clause 6.2.5, the receiving Party shall (i) promptly notify the disclosing Party of each such requirement and identify the Confidential Information required to be disclosed by such order, regulation, or law so that the disclosing Party, at its expense, may seek an appropriate protective order or other remedy and (ii) consult with the disclosing Party on the advisability of taking legally available steps to resist or narrow the scope of such requirement; and

(b) if, in the absence of such a protective order the receiving Party is nonetheless required by mandatory applicable law to disclose any part of the Confidential Information which is disclosed to it hereunder, the receiving Party may make such required disclosure of Confidential Information without liability under this Agreement, provided that the receiving Party shall furnish only that portion of the Confidential Information which it is legally required under such order, law or regulation; or

6.2.6 is approved for release in writing by an authorised representative of the other Party.

6.3 The University will not be in breach of any obligation to keep any of the Sponsor's Background Information, Materials & IP that is not Confidential Information, or any Results, by Publishing any of the same if the University has followed the procedure in clause 5.2 and has received no Confidentiality Notice within the period stated in that clause.

6.4 The Sponsor will not be in breach of any obligation to keep any of the University's Background Information, Materials & IP, or other information, confidential or not to disclose them to any third party, by making them available to any Affiliate, or any person working for or on behalf of the Sponsor or an Affiliate, who needs to know the same in order to exercise the rights granted in this Agreement, provided they are not used except as expressly permitted by this Agreement and the recipient undertakes to keep that Background Information, Materials & IP confidential.

6.5 If the University receives a request under the Freedom of Information Act 2000 to disclose any information that, under this Agreement, is the Sponsor's Confidential Information, it will notify the Sponsor and will consult with the Sponsor promptly and before making any disclosure under that Act. The Sponsor will respond to the University within 10 days after receiving the University's notice. If that notice requests that the Sponsor provide information to assist the University to determine whether or not an exemption to the Freedom of Information Act applies to the information requested under that Act, the Sponsor will use its reasonable efforts to provide such information promptly.

6.6 Neither the University nor the Sponsor will use the other's name or logo in any press release or product advertising, or for any other promotional purpose, without first obtaining the other's written consent, except that: (i) the University may identify the sums received from the Sponsor in the University's Annual Report and similar publications; (ii) the Sponsor may disclose the existence of this Agreement to its investors or prospective investors; and (iii) as otherwise required by law or regulation.

7. LIMITATION OF LIABILITY

7.1 Neither of the parties, except under clause 7.8, makes any representation or gives any warranty to the other that any advice or information given by it or any of its employees or students who work on the Project, or the content or use of any Results or Background Information, Materials & IP will not constitute or result in any infringement of third-party rights.

7.2 Except under the limited warranty in clause 7.8 and the indemnity in clause 7.3, and subject to clause 7.6, neither Party accepts any liability or responsibility for any use which may be made by the other Party of any Results, nor for any reliance which may be placed by that other Party on any Results, nor for advice or information given in connection with any Results.

7.3 The Sponsor will indemnify the University and the Principal Investigator and his direct reports (the Indemnified Parties), and keep them fully and effectively indemnified, against each and every claim made against any of the Indemnified Parties as a result of the Sponsor's use of any of the Results or any materials, works or information received from them pursuant to the terms of this Agreement, provided that the Indemnified Party must:

7.3.1 promptly notify the Sponsor of details of the claim;

7.3.2 not make any admission in relation to the claim;

7.3.3 allow the Sponsor to have the conduct of the defence or settlement of the claim; and

7.3.4 give the Sponsor all reasonable assistance (at the Sponsor's expense) in dealing with the claim.

Notwithstanding the foregoing, the indemnity in this clause will not apply to the extent that the claim arises as a result of the Indemnified Party's negligence, its breach of clauses 5 or 6, the deliberate breach of this Agreement or its knowing infringement of any third party's Intellectual Property.

7.4 Subject to clause 7.6, and except under the indemnity in clause 7.3, the liability of either Party to the other for any breach of this Agreement, any negligence or arising in any other way out of the subject matter of this Agreement, the Project and the Results, shall not extend: (i) to any indirect damages or losses; nor (ii) to any loss of profits, loss of bargain, loss of revenue, loss of business, or loss of opportunity, whether direct or indirect, even if, in any such case, the Party bringing the claim has advised the other of the possibility of those losses.

7.5 Subject to clause 7.6, and except under the indemnity in clause 7.3, the aggregate liability of each Party to the other for all and any breaches of this Agreement, any negligence or arising in any other way out of the subject matter of this Agreement, the Project and the Results, will not exceed in total the Financial Contribution.

7.6 Nothing in this Agreement limits or excludes either Party's liability for:

7.6.1 death or personal injury;

7.6.2 any fraud or for any sort of liability that, by law, cannot be limited or excluded; or

7.6.3 any loss or damage caused by a deliberate breach of this Agreement or a breach of clauses 4.3, 4.4, 4.5, 4.7, 5 or 6.

7.7 The express undertakings and warranties given by the parties in this Agreement are in lieu of all other warranties, conditions, terms, undertakings and obligations, whether express or implied by statute, common law, custom, trade usage, course of dealing or in any other way. All of these are excluded to the fullest extent permitted by law.

7.8 The University warrants to the Sponsor that, in relation to any assignment made under or pursuant to clause 4.4 and 4.5:

7.8.1 the University has the right to dispose of the Intellectual Property in the Results and that the University it will, at its own cost, do all that it reasonably can to give the title that it purports to give; and

7.8.2 that the Intellectual Property in the Results is free from all charges and encumbrances and rights of any third party (except those that the University is unaware or could not reasonably be aware of).

8. FORCE MAJEURE

If the performance by either Party of any of its obligations under this Agreement, except a payment obligation, is delayed or prevented by circumstances beyond its reasonable control, that Party will not be in breach of this Agreement because of that delay in performance. However, if the delay in performance is more than 6 months, the other Party may terminate this Agreement with immediate effect by giving written notice to the other Party.

9. **TERMINATION**

9.1 Either Party may terminate this Agreement with immediate effect by giving notice to the other Party if:

9.1.1 the other Party is in breach of any provision of this Agreement and, if it is capable of remedy, the breach has not been remedied within 60 days after receipt of written notice specifying the breach and requiring its remedy; or

9.1.2 the other Party shall become bankrupt, or shall file a petition in bankruptcy, or if the business of the Sponsor shall be placed in the hands of a receiver, assignee or trustee for the benefit of creditors, whether by the voluntary act of the Sponsor or otherwise.

9.2 Each of the parties will notify the other promptly if at any time any of the Key Personnel appointed by that Party is unable or unwilling to continue to be involved in the Project. Within 2 months after the date of that notice, the Party who originally appointed that member of the Key Personnel will nominate a successor. The other Party will not unreasonably refuse to accept the nominated successor, but if the successor is not acceptable to the other Party on reasonable grounds, or if the appointor cannot find a successor, either Party may terminate this Agreement by giving the other not less than 2 months' notice.

9.3 Clauses 1, 3, 4, 5, 6, 7, 9.3, 9.4, 9.5 and 10 will survive the expiry of the Project Period or the termination of this Agreement for any reason and will continue indefinitely.

9.4 On the termination of this Agreement, the Sponsor will pay the University for all work done prior to termination. If the Sponsor has paid any of the Financial Contribution in advance and the whole of that contribution has not, by the end of the Project Period or the termination of this Agreement, been used by the University for the purposes for which that Financial Contribution was provided, the University will return to the Sponsor the unused portion of that contribution.

9.5 Following the termination of this Agreement by the Sponsor under clause 9.2, if the Financial Contribution includes the costs of employing any University staff involved in the Project, the Sponsor will continue to reimburse, in accordance with clause 3, the actual direct employment costs of staff who were appointed by the University to work on the Project before the service of the notice, provided that the University takes all reasonable steps to minimise those costs. Reimbursement will continue until the effective date of termination of each staff contract or the date on which the Project was to have ended (whichever is the earlier). Those direct employment costs will include a proportion of any redundancy costs that have been incurred by the University as a direct result of the termination of this Agreement, that proportion to be calculated by dividing the individual's involvement in the Project by the duration of his period of employment by the University.

10. **GENERAL**

10.1 **Notices:** Any notice to be given under this Agreement must be in writing, may be delivered to the other Party or parties by any of the methods set out in the left hand column below, and will be deemed to be received on the corresponding day set out in the right hand column:

Method of service	**Deemed day of receipt**
By hand or courier	the day of delivery
By pre-paid first class post	the third Business Day after posting
By recorded delivery post	the second Business Day after posting

The parties' respective representatives for the receipt of notices are, until changed by notice given in accordance with this clause, as follows:

For the University:	**For the Sponsor:**
Name: The Director, Research Services	Name: Chandra Vargeese
Address: University Offices Wellington Square Oxford OX1 2JD	Address: c/o Wave Life Sciences Pte Ltd 419 Western Avenue Boston, MA 02135 USA
email address: research.services@admin.ox.ac.uk	email address: [***]

10.2 **Headings:** The headings in this Agreement are for ease of reference only; they do not affect its construction or interpretation.

10.3 **Assignment:** Neither Party may assign or transfer this Agreement as a whole, or any of its rights or obligations under it, without first obtaining the written consent of the other Party and that consent may not be unreasonably withheld or delayed. Notwithstanding the foregoing, provided that it gives reasonable notice to the University, the Sponsor may assign this Agreement without the consent of the University (i) to a purchaser, merging, or consolidating corporation, or acquirer of all or substantially all of its assets or business (or that portion thereof to which this Agreement relates) and/or pursuant to any reorganization of such part or (ii) to an Affiliate of the Sponsor.

10.4 **Illegal/unenforceable provisions:** If the whole or any part of any provision of this Agreement is void or unenforceable in any jurisdiction, the other provisions of this Agreement, and the rest of the void or unenforceable provision, will continue in force in that jurisdiction, and the validity and enforceability of that provision in any other jurisdiction will not be affected.

10.5 **Waiver of rights:** If a Party fails to enforce, or delays in enforcing, an obligation of the other Party, or fails to exercise, or delays in exercising, a right under this Agreement, that failure or delay will not affect its right to enforce that obligation or

constitute a waiver of that right. Any waiver of any provision of this Agreement will not, unless expressly stated to the contrary, constitute a waiver of that provision on a future occasion.

10.6 **No agency:** Nothing in this Agreement creates, implies or evidences any partnership or joint venture between the parties, or the relationship between them of principal and agent. Neither Party has any authority to make any representation or commitment, or to incur any liability, on behalf of the other.

10.7 **Entire agreement:** This Agreement constitutes the entire agreement between the parties relating to its subject matter. Each Party acknowledges that it has not entered into this Agreement on the basis of any warranty, representation, statement, agreement or undertaking except those expressly set out in this Agreement. Each Party waives any claim for breach of this Agreement, or any right to rescind this Agreement in respect of, any representation which is not an express provision of this Agreement. However, this clause does not exclude any liability which either Party may have to the other (or any right which either Party may have to rescind this Agreement) in respect of any fraudulent misrepresentation or fraudulent concealment prior to the execution of this Agreement.

10.8 **Intentionally deleted**

10.9 **Amendments:** No variation or amendment of this Agreement will be effective unless it is made in writing and signed by each Party's representative.

10.10 **Third parties:** No one except a Party to this Agreement has any right to prevent the amendment of this Agreement or its termination, and no one except a Party to this Agreement may enforce any benefit conferred by this Agreement, unless this Agreement expressly provides otherwise.

10.11 **Governing law:** This Agreement is governed by, and is to be construed in accordance with, English law. The English Courts will have exclusive jurisdiction to deal with any dispute which has arisen or may arise out of or in connection with this Agreement, except that either Party may bring proceedings for an injunction in any jurisdiction.

10.12 **Escalation:** If the parties are unable to reach agreement on any issue concerning this Agreement or the Project within [***] days after one Party has notified the other of that issue, they will refer the matter to Director of Research Services in the case of the University, and to its Chief Executive Officer in the case of the Sponsor in an attempt to resolve the issue within [***] days after the referral. Either Party may bring proceedings in accordance with clause 10.11 if the matter has not been resolved within that [***] day period, and either Party may apply to the court for an injunction, whether or not any issue has been escalated under this clause.

SIGNED for and on behalf of the University:

Name: Dr. Dan Blakey
Position: Senior Research Services Manager
University of Oxford

Signature: /s/ Dan Blakey

SIGNED for and on behalf of the Sponsor:

Name: Paul B. Bolno, M.D,
Position: President and Chief Executive Officer

Signature: /s/ Paul B. Bolno

Read and understood by the Principal Investigator

Name: Prof Matthew Wood

/s/ Matthew Wood
Signature

6/4/15
Date

SCHEDULE 1

The Financial Contribution

Date for Payment by the Sponsor[1]	Amount (excluding VAT[2]): US $
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
TOTAL	**[***]**

All amounts in this Schedule exclude VAT.

All payments of the Financial Contribution will be made by bank transfer to the University's US Dollar account:

Name of Bank:	[***]
Sortcode:	[***]
Address:	[***]
Account Name:	[***]
Account No.:	[***]
SWIFT address:	[***]
IBAN:	[***]

1 Within [***] days after receipt by the Sponsor of invoice
2 VAT will be added when chargeable.

SCHEDULE 2
[Description of Project]

*****Confidential Treatment Requested*****

SCHEDULE 3

Good Data Management Practices

1. Research data must be generated using sound scientific techniques and processes;
2. Research data must be accurately recorded in accordance with good scientific practices by the people conducting the research;
3. Research data must be analysed appropriately, without bias and in accordance with good scientific practices;
4. Research data and the Results must be stored securely and be easily retrievable;
5. Data trails must be kept to allow people to demonstrate easily and to reconstruct key decisions made during the conduct of the research, presentations made about the research and conclusions reached in respect of the research; and
6. Each Party must have the right, on not less than [***] days written notice, to visit any other Party to verify that it is complying with the above practices and procedures.

Exhibit 10.10

*****Text Omitted and Filed Separately with the Securities and Exchange Commission. Confidential Treatment Requested 17 C.F.R. Section 200.80(b)(4) and Rule 406 of the Securities Act of 1933, as amended.**

CONFIDENTIAL

CO-EXCLUSIVE LICENSE AGREEMENT

between

Max-Planck-Innovation GmbH
a German corporation having a principal place of business at
Amalienstr. 33, 80799 Muenchen, Germany
- hereinafter "**MI**" -

and

Wave Life Sciences PTE, Ltd.
a Singapore corporation having a principal place of business at
419 Western Avenue, Boston, Massachusetts 02135, USA
- hereinafter "**WAVE**" -

- MI and WAVE hereinafter also individually called a "**Party**", or collectively called the "**Parties**" -

*****Confidential Treatment Requested*****

Recitals

The Max-Planck-Gesellschaft zur Foerderung der Wissenschaften e.V. (hereinafter "**MPG**") is a German non-profit scientific research organisation. At the Max-Planck-Institute for Biophysical Chemistry in Goettingen ("**MPI-BC**"), a research institute of MPG, Dr. Thomas Tuschl and other scientists of MPI-BC have discovered the sequence and structural features of single-stranded RNA molecules required to mediate target-specific nucleic acid modifications by RNA interference ([***]). The aforementioned invention was funded by the German government. MPG has filed certain Patent Rights (as later defined herein) relating thereto.

MI is a wholly owned subsidiary of MPG and acts as MPG's technology transfer agency. MPG has authorized MI to act as its sole agent for patenting and licensing the Patent Rights, and to sign this Agreement in MI's own name for the account of MPG.

On [***], MI entered into a co-exclusive license agreement regarding the Patent Rights with each of Isis Pharmaceuticals, Inc., Carlsbad, CA 92008, USA (hereinafter "**ISIS**") and Alnylam Pharmaceuticals Inc., Cambridge, MA 02142, USA (hereinafter "**ALNYLAM**", and such agreement the "**ALNYLAM Agreement**").

On April 12, 2013, the United States Patent and Trademark Office declared a patent interference (No. 105,928) between the US UMMS Patent (as later defined herein) as junior party, and the US MPG Patent (as later defined herein) as senior party (the "**Patent Interference**"). As a result of the Patent Interference, the United States Patent and Trademark Office has determined that the US UMMS Patent had priority over the US MPG Patent. MI and the University of Massachusetts Medical School ("**UMMS**"), a U.S. public institution of higher education of the Commonwealth of Massachusetts, have agreed that the US UMMS Patent shall be added to the Patent Rights, and that MI shall be authorized by UMMS to sign license agreements that encompass the US UMMS Patent in MI's own name for the account of UMMS. In this respect, UMMS will be a third party beneficiary of this Agreement, and, unless expressly set forth otherwise in this Agreement, UMMS will have no rights against or obligations to WAVE under this Agreement.

On [***] ALNYLAM terminated the ALNYLAM Agreement, and ISIS subsequently declined the offer of MI to become the sole exclusive licensee and has remained the sole co-exclusive licensee.

WAVE desires to obtain from MI the second co-exclusive license under the Patent Rights for the purpose of developing and commercializing diagnostic and therapeutic products. WAVE (and its permitted successors and assignees) and ISIS (and its permitted successors and assignees) are hereinafter also individually called a "**Co-Exclusive Licensee**" and, together the "**Co-Exclusive Licensees**".

Now, therefore, MI and WAVE hereby agree as follows:

ARTICLE 1 - DEFINITIONS

1.1 "**Affiliate**"

shall mean any legal entity (such as a corporation, partnership, or limited liability company) that is controlled by a Party, is controlling a Party, or is under common control with a Party. For the purposes of this definition, the term "control" means (i) beneficial ownership of at least fifty percent (50%) of the voting securities of a legal entity with voting securities, or (ii) a fifty percent (50%) or greater interest in the net assets or profits of a legal entity without voting securities, or (iii) possession, directly or indirectly, of the power to elect or direct the management of a legal entity.

1.2 "**Agreement**"

shall mean this present agreement between MI and WAVE, including any and all Appendices hereto.

1.3 "**Confidential Information**"

shall mean any information which is of a confidential and proprietary nature and not readily available to a Third Party, including without limitation information in relation to the business of a Party to which this Agreement relates, and information in relation to patents, patent applications or other intellectual property rights owned or controlled by a Party. To be deemed confidential, information in written, graphic, or electronic form shall be identified as being confidential at the time of disclosure, or, if disclosed orally or visually, shall be confirmed in a writing marked confidential within thirty (30) days of its oral disclosure.

The term "**Confidential Information**" shall not include any information that the receiving Party can establish by written records (i) was known by the receiving Party prior to the receipt of Confidential information from the disclosing Party, (ii) was disclosed to the receiving Party by a Third Party having the right to do so, (iii) was, or subsequently became, in the public domain through no fault of the receiving Party, or (iv) was subsequently and independently developed by personnel of the receiving Party without having had access to or making use of the disclosing Party's Confidential Information.

1.4 "**Control**" **or** "**Controlled**"

shall mean, with respect to any patents, patent applications, or other intellectual property rights, possession of the right (whether by ownership, license or otherwise), to assign, or grant a license to, such patents, patent applications, or other intellectual property rights without violating the terms of any agreement or other arrangement with any Third Party.

1.5 "**Development Collaboration**"

shall mean a collaboration by WAVE with a Third Party the purpose of which is the (i) further development and/or commercialization of a Licensed Product discovered by WAVE (either on its own or as part of a Drug Discovery Collaboration) or (ii) further joint development and/or joint commercialization of Licensed Products, in each case, beginning after the initiation of IND-Enabling Tox Studies for such Licensed Products. Collaborations that do not include or involve the licensed Patent Rights shall not constitute Development Collaborations.

1.6 "**Drug Discovery Collaboration**"

shall mean a collaboration by WAVE with a Third Party the purpose of which is the joint discovery, joint development and/or joint optimization of Licensed Products up to, but not including, IND-Enabling Tox Studies for such Licensed Products.

1.7 "**Effective Date**"

shall mean the date when this Agreement comes into force and effect, which shall be the day of the signature of this Agreement by the Party last to sign.

1.8 "**FDA**"

shall mean (i) the United States Food and Drug Administration or any successor agency thereto, and (ii) any non-United States agency or commission performing comparable functions (e.g. the European Medicines Agency EMA) or any successor agency thereto.

1.9 "**Field**"

shall mean sale and use of Licensed Products and/or Licensed Processes for any purpose.

1.10 "**IND**"

shall mean an investigational new drug application submitted to a Regulatory Authority for approval to conduct human clinical investigations of Licensed Products, including (a) an investigational new drug application or any successor application or procedure filed with the United States FDA, and (b) any foreign equivalent.

1.11 "**IND-Enabling Tox Studies**"

shall mean the toxicological animal studies required to meet the regulations for filing an IND.

1.12 "**Licensed Products**"

shall mean any product or part thereof (i) the development, manufacture, use or sale of which, absent the license granted hereunder, would infringe one or more Valid Claims of the Patent Rights, or (ii) which is manufactured by using a Licensed Process or that, when used, practices a Licensed Process; Licensed Products will be determined on a country-by-country basis.

1.13 "**Licensed Process**"

shall mean any process that, absent the license granted hereunder, would infringe one or more Valid Claims of the Patent Rights, or which uses a Licensed Product; Licensed Processes will be determined on a country-by-country basis.

1.14 "**Major Market Country**"

shall mean the United States of America, the United Kingdom, Germany or Japan.

1.15 "**NDA**"

shall mean an application submitted to a Regulatory Authority for marketing approval of a pharmaceutical product, including (i) a new drug application, product license application or biologics license application filed with the United States FDA or any successor applications or procedures, and (ii) any foreign equivalent of a new drug application, product license application or biologics license application.

1.16 "**Net Sales**"

shall mean the gross amount invoiced by WAVE, its Affiliates, Sublicensees and their Sales Partners to independent Third Parties for sales or other dispositions of their respective Licensed Products in a first commercial sale at arm's length transaction, less the following: (i) to the extent separately stated on the document of sale, any taxes or duties imposed on the manufacture, use, sale or import of Licensed Products which are actually paid, (ii) to the extent separately stated on the document of sale, outbound transportation costs and costs of insurance in transit, (iii) customary trade, cash or quantity discounts or rebates, to the extent actually allowed and taken, (iv) amounts repaid or credited by reason of rejection or return and (v) a reasonable allowance for ultimately bad debts.

WAVE, its Affiliates and Sublicensees will be treated as having sold their respective Licensed Products for an amount equal to the fair market value of such Licensed Products, if (i) Licensed Products are used by WAVE, its Affiliates and Sublicensees without charge or provision of invoice, or (ii) Licensed Products are provided to a Third Party by WAVE, its Affiliates and Sublicensees without charge or provision of invoice and used by such Third Party, except in the cases of Licensed Products used to conduct non-clinical research, product development or clinical trials, reasonable amounts of Licensed Products used as marketing samples, and Licensed Products provided without charge for compassionate or similar uses.

If WAVE, its Affiliates or Sublicensees sell a Licensed Product in unfinished form (*i.e.*, bulk Active Pharmaceutical Ingredient) to a Third Party for resale, then the gross amount to be included in the calculation of Net Sales arising from such sale shall be the amount invoiced by the Third Party upon resale, in lieu of the amounts invoiced by WAVE, its Affiliates or Sublicensee when selling the Licensed Product in unfinished form. Otherwise, where WAVE, its Affiliate or Sublicensee sell a Licensed Product in finished form in a manner and at a price consistent with industry standards for such sales to a Third Party (including a Sales Partner) for

further resale, the amount to be included in the calculation of Net Sales shall be the amount invoiced by WAVE, its Affiliates or Sublicensees to such Third Party, not the amount invoiced by such Third Party upon resale.

No deductions shall be made for commissions paid to individuals or entities, or for cost of collections. Net Sales shall occur on the date of invoice for a Licensed Product. In the case of any sale of Licensed Products for non-cash consideration (*e.g.*, devices, services, use rights, equity etc.), Net Sales shall be calculated on the fair market value of the consideration received.

Sales of Licensed Products between WAVE and its Affiliates and/or Sublicensees, or among such Affiliates and Sublicensees, for a subsequent resale of such Licensed Product to a Third Party, shall not be included in the calculation of Net Sales, but in such cases the Net Sales shall be calculated on the amount invoiced by such Affiliates or Sublicensees to a Third Party upon resale.

In the event that a Licensed Product is sold in a combination product form (with one or more other therapeutically active ingredients (excluding, without limitation, any formulation, stabilization and delivery components) which are not Licensed Products), which therapeutically active ingredients are also independently marketed during the royalty period in question in the country in question, then Net Sales, for purposes of determining royalty payments on the combination product, shall be calculated by multiplying the Net Sales of the combination product by the fraction A/(A+B), where A is [***], and B is [***]. In the event that a Licensed Product is sold in combination with other therapeutically active ingredient(s), and the Licensed Product or one or more other therapeutically active ingredients are not sold separately, Net Sales for the purposes of determining royalty payments shall be calculated by multiplying the Net Sales of the combination product by the fraction of C/(C+D), where C is [***] and D is the [***]

1.17 "**Patent Rights**"

shall mean:

(a) the issued patents and pending patent applications and provisional patent applications listed on Appendix A, and the resulting patents,

(b) any patent applications resulting from the provisional applications listed on Appendix A, and any divisionals, continuations, continuation-in-part applications, and requests for continued examination (and their relevant international equivalents) of the patent applications listed on Appendix A and of such patent applications that result from the provisional applications listed on Appendix A, and the resulting patents, in each case to the extent the claims are directed to the subject matter specifically described in the patent applications listed on Appendix A and ultimately claiming priority to the patent applications listed on Appendix A, and

(c) any patents resulting from re-issues, re-examinations, or extensions (including supplemental protection certificates) (and their relevant international equivalents) of the patents described in (a) and (b) above.

For the avoidance of doubt, the term "Patent Rights" shall include the US UMMS Patent.

1.18 "**Phase I Clinical Study**"

shall mean a clinical investigation of a Licensed Product in human healthy persons or patients designed and conducted to evaluate safety and/or tolerance.

1.19 "**Phase II Clinical Study**"

shall mean a clinical investigation of a Licensed Product in human patients to determine initial efficacy for a particular indication, short-term side effects and/or dose range finding.

1.20 "**Phase III Clinical Study**"

shall mean a clinical investigation of a Licensed Product in human patients to establish efficacy and safety and required to file a NDA application of a Licensed Product with Regulatory Authorities.

1.21 "**Platform License**"

shall mean a license granted by WAVE to a Third Party, in which multiple patents (including the Patent Rights granted as a sublicense in accordance with Section 2.2 below, and substantial other patents reasonably necessary or useful for the development and/or commercialization of a Licensed Product that are Controlled by WAVE and granted to such Third Party as a direct license), are bundled together for use by such Third Party/Sublicensee such that the Third Party/Sublicensee may pursue the research, manufacture, development and commercialization of Licensed Products using technology covered by one or more of such multiple patents (including the Patent Rights); provided, however, that a license shall not be a "Platform License" if the only patents licensed thereunder are Patent Rights.

1.22 "**Regulatory Approval**"

shall mean any and all approvals (including any applicable governmental price and reimbursement approvals), licenses, registrations or authorizations of any Regulatory Authority necessary for the manufacture, use, storage, import, promotion, marketing, pricing and/or sale of a Licensed Product in a country.

1.23 "**Regulatory Authority**"

shall mean any federal, national, multinational, state, provincial or local regulatory agency, department, bureau or other governmental entity with authority over the testing, manufacture, use, storage, import, promotion, marketing, pricing and/or sale of a Licensed Product in a country, including without limitation the FDA and the EMA.

1.24 "**Sales Partner**"

shall mean any person or legal entity that is authorized by WAVE (or its Affiliates or Sublicensees) by any kind of agreement to market, promote, distribute or sell, or otherwise dispose of, Licensed Products to an independent Third Party in a first commercial sale at arm's length transaction without violating this Agreement or the Patent Rights.

For the purpose of this definition, "Sales Partner" shall not include distributors who purchase Licensed Products from WAVE (or its Affiliates or Sublicensees) in a first commercial sale at arm's length transaction for further resale, provided that the relation between WAVE (or its Affiliates or Sublicensees) and such distributor is a pure seller-buyer relationship, i.e. the agreement between WAVE (or its Affiliates or Sublicensees) and such distributor does not contain any obligation to share costs or revenues, or a reporting obligation or responsibility for sales and/or marketing efforts in a country. In such event, the gross amount to be included in the calculation of Net Sales shall be the amount invoiced by WAVE (or its Affiliates or Sublicensees) to such distributor, not the amount invoiced by such distributor upon resale.

1.25 "**Sublicensee**"

shall mean any Third Party that is granted a sublicense to the Patent Rights in accordance with Section 2.2.

1.26 "**Sublicense Consideration**"

shall mean any consideration, whether in cash (including, without limitation, initial or upfront payments, technology access fees, annual maintenance fees) or in kind (including, without limitation, devices, services, licenses or any other use rights, shares, options, warrants or any

other kind of securities), received by WAVE from its respective Sublicensees to the extent it is paid pursuant to and in consideration for the sublicense granted under the Patent Rights. Sublicense Consideration specifically excludes (i) any milestone payments relating to the achievement of certain clinical or regulatory events, (ii) any running royalties paid by the Sublicensee to WAVE on net sales of Licensed Products sold by the Sublicensee, (iii) payments made by the Sublicensee to WAVE as consideration for WAVE'S equity (shares, options, warrants or any other kind of securities) at fair market value, and (iv) payments made by the Sublicensee to WAVE specifically committed and allocated to reimburse WAVE for its actually spent costs of actually performed research and development activities under a research agreement with the Sublicensee specifically and directly in connection with the sublicense granted.

1.27 "**Term**"

shall have the meaning set forth in Section 9.1 of this Agreement.

1.28 "**Third Party**"

shall mean any person or entity other than MI and WAVE and their respective Affiliates.

1.29 "**US MPG Patent**"

shall mean US Patent No. [***].

1.30 "**US UMMS Patent**"

shall mean the US Patent Application [***].

1.31 "**Valid Claims**"

shall mean any claim in an issued patent or pending patent application within the Patent Rights in the country in question that (i) has not lapsed, and (ii) has not been withdrawn, canceled or disclaimed, or held unenforceable by a tribunal of competent jurisdiction in an unappealed or unappealable decision, provided, however, that Valid Claim will exclude any such pending claim in an application that has not been granted within 10 years following the earliest priority date of such application.

ARTICLE 2 - GRANT OF RIGHTS

2.1 License Grant

MI hereby grants to WAVE and its Affiliates a co-exclusive royalty-bearing, worldwide license, with the right to sublicense in accordance with Section 2.2, under the Patent Rights to research, develop, commercialize, make, have made, use, have used, offer for sale, sell, have sold, import, export, have imported and have exported Licensed Products and Licensed Processes in the Field.

In order to establish co-exclusivity, and subject to the terms of the last paragraph of this Section 2.1, MI shall not grant, during the Term, more than in total two co-exclusive licenses to the Patent Rights in the Field. For the avoidance of doubt, in no event will there be more than two (2) co-exclusive licenses to the Patent Rights in the Field in existence at any given time. As of the Effective Date, the co-exclusive licensors are ISIS and WAVE.

In the event that either ISIS or WAVE, as applicable, ceases to be a Co-Exclusive Licensee under this Agreement (the "**Terminated Co-Exclusive Licensee**"), MI shall promptly provide the remaining Co-Exclusive Licensee with a written offer of an exclusive license under the Patent Rights in the Field, on substantially the same terms and conditions (including substantially the same economic terms) (such offer, an "**Exclusivity Notice**") previously applicable to the Terminated Co-Exclusive Licensee under this Agreement. The remaining Co-Exclusive Licensee shall have the right, but not the obligation, for a period not to exceed three (3) months after receipt of an Exclusivity Notice, to execute such exclusive license with MI, after which time, if such exclusive license is not executed, MI will be free to negotiate one additional co-exclusive license with a Third Party (co-exclusive with the remaining Co-Exclusive Licensee) the material terms and conditions of which are no more favorable to such Third Party as a whole than the terms and conditions applicable to the remaining Co-Exclusive Licensee under this Agreement; *provided*, *however*, that any such co-exclusive license agreement granted to a Third Party will be consistent with this Agreement.

2.2 Sublicenses

(a) WAVE (but not its Affiliates) has the right to grant sublicenses to the rights granted under Section 2.1 to Third Parties, however only (i) in connection with a Platform License, Drug Discovery Collaboration or Development Collaboration, (ii) to a Sales Partner for the sale of Licensed Products, or (iii) pursuant to a contract under which WAVE retains substantially all intellectual property arising from the sublicense of the Patent Rights and retains the sole right to commercialize Licensed Products, including without limitation a contract with a contract manufacturing organization ("**CMO**") for the manufacture of Licensed Products solely for WAVE.

(b) WAVE shall ensure that each sublicense granted under this Agreement, and any subsequent sublicenses granted by any Sublicensee, shall be subject and subordinate to, and consistent with, the terms and conditions of this Agreement.

(c) Within 30 days after the signature of each sublicense granted under this Agreement, WAVE shall provide MI with a copy of the signed sublicense agreement, subject to reasonable redactions to protect the confidential information of the Sublicensee.

2.3 Retained Rights; Improvements

MPG (specifically the MPI-BC) and UMMS each retains the right to practice under the Patent Rights for scientific research, teaching, education, non-commercial scientific collaboration (including collaborations with and/or sponsored by industry), *provided that* such collaborations will not include the grant of a right to the industry partner to develop or commercialize Licensed Products under the Patent Rights in the Field (*i.e.*, any partnership with industry must focus on research only and may not be performed in conjunction with the development of a Licensed Product) and scientific publication purposes.

If, as a result of MPI-BC's practice of the Patent Rights, the MPI-BC makes, within [***] months after the Effective Date, an improvement to the Patent Rights consisting of an invention that directly relates to or is directly based upon the invention embodied in the Patent Rights (the "**Improvement**"), such Improvement will be deemed automatically included in the license grant to WAVE under Section 2.1(a) as of the Effective Date for no additional consideration, but only to the extent such Improvement is necessary to practice the Patent Rights.

WAVE acknowledges that the German government retains a royalty-free, non-exclusive, non-transferable license to practice any government-funded invention claimed in the Patent Rights for governmental purposes, and that UMMS retains the right to grant licenses under the US UMMS Patent to the United States Government in accordance with 35 USC 200-212 or 37 CFR 401 et seq. and applicable governmental implementing regulations.

2.4 No Additional Rights

Except as otherwise expressly provided in this Agreement, nothing in this Agreement shall be construed to confer any rights upon WAVE by implication, estoppel, or otherwise, as to any intellectual property rights, including without limitation patents and patent applications, trademarks, copyrights and know-how of MPG and UMMS other than the Patent Rights.

2.5 No Additional Support by MPI-BC

Neither MI nor MPG nor MPI-BC nor UMMS shall have any obligation under this Agreement to provide support to WAVE in connection with the development and commercialization of Licensed Products. WAVE may ask MPI-BC at any time during the Term to provide such support. MPI-BC shall have the right, in its discretion, to enter into a scientific collaboration agreement, and/or MPI-BC employees shall have the right, in their discretion, to enter into a scientific consultancy agreement, provided that the aforementioned agreements are in compliance with the applicable rules of MPG. Notwithstanding the foregoing, WAVE and MI shall cooperate regarding the prosecution of the Patent Rights, as further specified in Article 6 below.

ARTICLE 3 - REPRESENTATIONS OR WARRANTIES

3.1 Representations by MI

MI represents that, as of the Effective Date: (i) the Patent Rights (except for the US UMMS Patent) have been assigned to MPG, and the US UMMS Patent has been assigned to UMMS; (ii) MI is the sole licensor of the Patent Rights and authorized by MPG (and UMMS regarding the US UMMS Patent) to enter into this Agreement, and to perform all obligations hereunder, (iii) MI has Control of the US UMMS Patent via a written agreement with UMMS and the right to execute this Agreement on behalf of UMMS in MI's own name and for the account of UMMS, hereby incorporating the US UMMS Patent in the Patent Rights, , and MI has obtained all required approvals from UMMS (if any); (iv) no other licenses to the Patent Rights (except for the co-exclusive licenses granted to ISIS and ALNYLAM) have been granted by MI to any Third Party; (v) the Patent Rights listed in Appendix A validly exist, the necessary documents have been filed with the relevant patent offices, and the necessary fees have been paid in; (vi) MI has no reason to believe that the Patent Rights are invalid or subject to any contested ownership claim; (vii) the ALYLAM Agreement is terminated, void, cancelled, and no longer in force and effect and ALNYLAM does not own or Control, or claims to own or Control, by implication or otherwise, any of the Patent Rights; and (viii) MI notified ISIS of ALNYLAM's termination of the ALNYLAM Agreement with MI pertaining to the Patent Rights as a co-exclusive licensee in a timely manner, offered ISIS the opportunity to become the sole-exclusive licensee of the Patent Rights, and ISIS declined to become the sole exclusive licensee of the Patent Right.

3.2 No Further Representations

OTHER THAN AS EXPRESSLY PROVIDED IN SECTION 3.1, MI AND MPG AND UMMS MAKE NO REPRESENTATIONS OR WARRANTIES OF ANY KIND CONCERNING THE PATENT RIGHTS AND ANY LICENSED PRODUCT, EXPRESS OR IMPLIED, AND THE ABSENCE OF ANY LEGAL OR ACTUAL DEFECTS, WHETHER OR NOT DISCOVERABLE.

Specifically, and not to limit the foregoing, MI and MPG and UMMS make no representations or warranties (i) regarding the merchantability or fitness for a particular purpose of the Patent Rights, (ii) regarding the patentability, validity or scope of the Patent Rights, (iii) that the use of the Patent Rights or any Licensed Product will not infringe any patents or other intellectual property rights of a Third Party, and (iv) that the use of the Patent Rights or any Licensed Product will not cause any damages of any kind to WAVE or to a Third Party.

3.3 Limitation of Liability

TO THE EXTENT LEGALLY PERMISSIBLE, IN NO EVENT SHALL EITHER PARTY (INCLUDING UMMS) OR THEIR RESPECTIVE TRUSTEES, DIRECTORS, OFFICERS, EMPLOYEES AND AFFILIATES BE LIABLE TO THE OTHER PARTY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND, INCLUDING ECONOMIC DAMAGES OR INJURY TO PROPERTY AND LOST PROFITS, REGARDLESS OF WHETHER THE OTHER PARTY SHALL BE ADVISED, SHALL HAVE OTHER REASON TO KNOW, OR IN FACT SHALL KNOW OF THE POSSIBILITY OF THE FOREGOING.

3.4 WAVE acknowledges that MI has informed WAVE that MI has not performed its own patent due diligence, in particular no patent search or freedom to operate analysis has been made by MI.

ARTICLE 4 - COMPANY DILIGENCE OBLIGATIONS

4.1 Development and Commercialisation Responsibilities

WAVE shall have sole and full responsibility to use commercially reasonable efforts to develop and commercialize, solely or jointly with its Affiliates and/or Sublicensees, Licensed Products in the Field; provided, however, that any work done by WAVE'S respective Affiliates or Sublicensees, to develop and commercialize Licensed Products in the Field, shall be deemed to satisfy each Party's obligations under this Section 4.1.

4.2 Development and Commercialisation Reports

WAVE shall furnish to MI, and shall oblige its Affiliates and Sublicensees to furnish to WAVE for inclusion in its respective reports to MI, in writing annually, within [***] days after the end of each calendar year, with a report briefly summarizing development and commercialization efforts undertaken during the previous year. The first report shall be provided to MI for the calendar year of 2015. Such reports will be considered and treated as WAVE'S Confidential Information.

4.3 Compliance with Laws

WAVE shall use, and shall oblige its Affiliates and Sublicensees to use, commercially reasonable efforts to comply with all local, state, federal, and international laws and regulations applicable to the development, manufacture, use and sale of Licensed Products.

4.4 Non-Use of Names

Subject to Article 10.11, Neither WAVE nor its Affiliates or Sublicensees or Sales Partners may use the name of "Max Planck Institute", "Max Planck Society", "Max-Planck-Innovation", "University of Massachusetts Medical School", or any variation, adaptation, or abbreviation thereof, or of any of its trustees, officers, faculty, students, employees, or agents, or any trademark owned by any of the aforementioned, in any promotional material or other public announcement or disclosure without the prior written consent of MI, or in the case of an individual, the consent of that individual.

4.5 Liability for Affiliates and Sublicensees

If Affiliates of WAVE develop, manufacture, use and/or sell Licensed Products, WAVE warrants and is liable towards MI that its Affiliates perform this Agreement in accordance with the terms and conditions of this Agreement, and WAVE shall be responsible and liable for any acts and omissions, e.g. payments and reports, of its Affiliates.

Any sublicense granted by WAVE under this Agreement is subject to and shall be consistent with the terms and conditions of this Agreement. The grant of any such sublicense hereunder will not relieve WAVE of its obligations under this Agreement.

4.6 Effect of Failure

In the event that WAVE or any of its Affiliates or Sublicensees have failed to fulfill any of their obligations under this Article 4, then MI may treat such failure as a material breach of WAVE, and may terminate this Agreement in accordance with Section 9.6.

ARTICLE 5 - FINANCIAL PROVISIONS

5.1 Initiation Fee

WAVE shall pay to MI, within [***] ([***]) days after the Effective Date, a license initiation fee of USD $[***] (United States Dollar [***]).

5.2 Annual License Maintenance Fees

WAVE shall pay to MI, within [***] ([***]) days after the anniversary date of the Effective Date, on that same date each year thereafter for the Term of this Agreement, an annual license maintenance fee of USD $[***] (United States Dollar [***]).

Annual License Maintenance Fees paid by WAVE for a certain calendar year will be credited against WAVE'S respective actual earned royalties payable to MI under Section 5.4 for the same calendar year.

5.3 Milestone Payments

WAVE shall pay to MI the following milestone payments for its Licensed Products within [***] ([***]) days after the achievement by WAVE, its Affiliates or Sublicensees of the following milestone events:

Milestone Event	Milestone Payment	
[***]	USD	[***]
[***]	USD	[***]
[***]	USD	[***]
[***]	USD	[***]

[***].

WAVE shall inform MI immediately on the achievement of each respective milestone event (but in no event later than [***] days after such an achievement).

Each of the above milestone payments is due by WAVE to MI for each respective Licensed Product separately, and regardless of whether the milestone event is achieved by WAVE, its Affiliates or Sublicensees. For the avoidance of doubt, each milestone payment is payable only once per Target irrespective of the number of Licensed Products targeting such Target to achieve such milestone. For purposes of this Section 5.3, the term "**Target**" means a single gene, as defined in the NCBI Entrez Gene database, or any successor database thereto, and any naturally occurring variants thereof, or a product of such gene.

5.4 Running Royalties

(a) Royalty Rate

During the Term, WAVE shall pay to MI running royalties on Net Sales of Licensed Products of [***]% ([***]) on a Licensed Product-by-Licensed Product and country-by-country basis. For the avoidance of doubt, in the event ISIS and WAVE are jointly developing and/or commercializing a Licensed Product, the running royalty set forth in the preceding

sentence shall be due by ISIS and WAVE for each of their respective Net Sales of such Licensed Product separately. For example only, if ISIS and WAVE have a collaboration agreement for the development and commercialization of a Licensed Product, and ISIS sells the respective Licensed Product under such a collaboration agreement, a royalty of [***]% on the respective Net Sales of ISIS of such Licensed Product will be due from ISIS, and if WAVE sells the respective Licensed Product under such a collaboration agreement, a separate royalty of [***]% on the respective Net Sales of WAVE will be due from WAVE, and *vice versa*.

(b) Royalty Stacking; Minimum Royalty Floor

If WAVE is a party to a license agreement with any Third Party, which license is employed in connection with the Patent Rights for the manufacture, use and/or sale of a Licensed Product (i.e. if Licensed Products sold by WAVE require WAVE to pay royalties to a Third Party), the royalty rate set forth in Section 5.4 (a) above will be reduced, on a country-by-country and Licensed Product-by-Licensed Product basis, from the date running royalties have to be actually paid to such Third Party, by up to [***]% of any running royalty owed to such Third Party for the manufacture, use or sale of such a Licensed Product; provided, however, in no event shall the royalty rate due to MI according to Section 5.4 (a) be reduced by the application of this Section 5.4 (b) to less than a minimum royalty rate of [***]% ([***]).

5.5 Sublicense Revenues

(a) In the event that WAVE grants a sublicense to a Third Party pursuant to Section 2.2, WAVE shall pay to MI the following percentages of the Sublicense Consideration received, due within [***] days after receipt:

Sublicense granted	Percentage due to MI
[***]	[***]%
[***]	[***]%
[***]	[***]%
[***]	[***]%
[***]	[***]%

If WAVE receives any non-cash Sublicense Consideration, WAVE shall pay MI, at MI's election, either (i) a cash payment equal to the fair market value of the Sublicense Consideration, or (ii) the in-kind portion, if practicable, of the Sublicense Consideration.

(b) Notwithstanding anything to the contrary in this Agreement, if WAVE, its Affiliates or Sublicensees grant a sublicense to a CMO for the purpose of having the CMO manufacture a Licensed Product for the further development and/or commercialization of such Licensed Product solely by WAVE, its Affiliates or Sublicensees, no sublicense revenue will be due under this Section 5.5 as a result of such sublicense.

(c) Relative Value of Pooled Technologies

In the event of a Platform License, Drug Discovery Collaboration, or Development Collaboration, the percentage of the Sublicense Consideration due to MI according to Subsection (a) above shall be based on the value reasonably attributable to the Patent Rights relative to the value of such other patent rights Controlled by WAVE included in such Platform License, Drug Discovery Collaboration, or Development Collaboration (such relative value of the Patent Rights hereinafter the "**Patent Rights Value**").

Together with a copy of any sublicense agreement to be provided to MI according to Section 2.2(c), WAVE shall suggest to MI the Patent Rights Value based on a good faith fair market value determination, together with any information reasonably necessary or useful for MI to evaluate such suggestion. If, within [***] days after receipt of the information, MI objects for cause to the suggested Patent Rights Value, Sec. 10.3 (b) applies accordingly. If MI fails to respond within [***] days after receipt of the information, the Patent Rights Value shall be deemed accepted.

(d) Fair Market Value Determination

In the event that, according to this Agreement, a "*fair market value*" has to be determined, WAVE shall provide MI in due time with a good faith determination of the fair market value, together with any information necessary or useful to support such determination. MI shall have the right to provide WAVE in due time with a counter-determination of the fair market value, which shall include any information necessary or useful to support such counter-determination. If the Parties are unable to agree on a fair market value determination within [***] days after receipt of such counter-determination, Section 10.3 (b) applies accordingly. If either Party fails to respond to a fair market value determination provided by the other Party within [***] days of receipt, such Party will be deemed to have accepted the other Party's fair market value determination.

5.6 Reports

Starting with the first commercial sale of a Licensed Product, within [***] ([***]) days of the end of each calendar half year, WAVE shall deliver a detailed report to MI for the immediately preceding calendar half year showing at least, on a Licensed Product-by-Licensed Product and country-by-country basis, (i) the kind and number of Licensed Products sold by WAVE, its Affiliates, Sublicensees and their Sales Partners to the end users, (ii) the gross price charged, (iii) the calculation of Net Sales, and (iv) the resulting running royalties due to MI according to those figures. If no running royalties are due to MI, the report shall so state. Reports provided to MI under this 5.6 shall be considered "Confidential Information" under this Agreement. Additionally, MI understands that it is the intention of WAVE to become a publicly traded company and that any information disclosed to MI under this Agreement, including this 5.6, may be deemed "material non-public information" under applicable securities laws.

5.7 Payments

(a) Accounting Period and Payments

Running royalties shall be payable for each calendar half year, and shall be due to MI within [***] ([***]) days of the end of each calendar half year.

(b) Method of Payment

All payments under this Agreement shall be made payable to "Max-Planck-Innovation GmbH" to the following account:

[***]
[***]
[***]
Account No.: [***]
Bank code: [***]
SWIFT (BIC): [***]
IBAN: [***]

Each payment shall reference this Agreement and the obligation under this Agreement that the payment satisfies.

(c) Payments in US Dollar

All payments due under this Agreement shall be payable in US Dollar and, if legally required, shall be paid with the additional value added tax. Conversion of foreign currency to US Dollar shall be made at the official conversion rate existing in the United States (as reported in the *Wall Street Journal*) on the last working day of the relevant calendar half year. Such payments

shall be without deduction of exchange, collection, or other charges, except for deduction of withholding or similar taxes. The Parties shall use all reasonable and legal efforts to reduce tax withholding on payments made to MI hereunder. Notwithstanding such efforts, if WAVE concludes that tax withholdings under the laws of any country are required with respect to payments to MI, WAVE shall withhold the required amount and pay it to the appropriate governmental authority. In such a case, WAVE will promptly provide MI with original receipts or other evidence reasonably desirable and sufficient to allow MI to document such tax withholdings adequately for purposes of claiming foreign tax credits and similar benefits.

(d) Late Payments

Any undisputed payments that are not paid on or before the date such payments are due under this Agreement shall bear interest on arrears at [***]% ([***] percentage points) per year.

5.8 Bookkeeping and Auditing

WAVE is obliged to keep, and shall oblige its Affiliates, Sublicensees and Sales Partners to keep, complete and accurate books on any reports and payments due to MI under this Agreement, which books shall contain sufficient information to permit MI's certified public accountant (the "**CPA**") to confirm the accuracy of any reports and payments made to MI. MI's CPA is authorized to check the books of WAVE not more than [***] per calendar year and, upon MI's written request, within [***] days, WAVE shall provide records of its Affiliates, Sublicensees and Sales Partners in WAVE's possession as part of such audit. The charges for such a check shall be borne by MI. In the event that such check reveals an underpayment in excess of [***]% ([***] percent), WAVE shall bear the full cost of such check. In any event, WAVE shall remit any amounts due to MI within [***] ([***]) days of receiving notice thereof from MI, together with interest calculated in the manner provided in Section 5.7 (d).

The right of auditing by MI under this Section shall expire [***] ([***]) years after each report or payment has been made. No period may be audited more than once.

5.9 No Refund

All payments made by WAVE under this Agreement are non-refundable and non-creditable against each other (except for the creditability of annual license maintenance fees against running royalties as set forth in Section 5.2, or the credit for an over-payment of running royalties). This Section 5.9 shall apply, without limitation, in the event this Agreement is terminated prematurely in accordance with Article 9.

ARTICLE 6 - PATENT PROSECUTION AND INFRINGEMENT

6.1 Responsibility for Patent Rights

MI shall be responsible to apply for, seek issuance of, and maintain the Patent Rights. MI shall provide to WAVE copies of documents relevant to the filing, prosecution, maintenance and abandonment of the Patent Rights. MI shall designate counsel to prosecute the Patent Rights which is reasonably acceptable to WAVE, and WAVE shall have the right to require that MI transfers prosecution to different counsel if WAVE, as the case may be, is not reasonably satisfied with the work of MI's then-current prosecution counsel. WAVE shall have the right to comment on decisions related to prosecution, maintenance and abandonment of the Patent Rights, and MI shall give good faith consideration to any such comments. MI, ISIS and WAVE shall cooperate in good faith with each other, and shall use reasonable efforts to agree upon a joint strategy relating to the further filing, prosecution and maintenance of the Patent Rights. WAVE shall have the right to decide, in its sole discretion, in which countries the Patent Rights shall be filed, prosecuted and maintained during the Term. MI is obliged, on a country-by-country basis, to file, prosecute and maintain the Patent Rights if and to the extent WAVE pays its respective patent costs relating thereto according to Section 6.2 below.

6.2 Patent Costs

WAVE shall pay [***]% ([***] percent) of all reasonable out of pocket fees and costs, including reasonable attorney's fees, relating to the preparation, filing, prosecution, and maintenance of the Patent Rights, which arise during the Term in accordance with Section 6.1 above. WAVE shall reimburse MI for the amounts due pursuant to this Section 6.2, within [***] ([***]) days after receiving the respective invoice. MI shall have the right, in its sole discretion, to make a one time (only) election that such amounts shall be paid directly to MI's patent attorneys, and shall provide WAVE with [***] ([***]) days advance written notice of such election. In the event that solely WAVE (and not ISIS) intends to file, prosecute and maintain a certain patent application or patent within the Patent Rights in a certain country, then WAVE shall pay [***]% of all patent costs relating to such Patent Right in such country.

6.3 Abandonment of Patent Rights

In the event that WAVE intends to abandon (e.g. by non-payment of fees) any patent or patent application within the Patent Rights in a certain country, WAVE shall notify MI hereof in writing in due time, at least [***] months prior to taking action or not taking action that will result in abandonment. MI (and (SIS) shall have the right, but not the obligation, to maintain such Patent Right in such country in its sole discretion and at its sole expense. In any event, such Patent Rights shall no longer be covered by this Agreement after [***] months from the date WAVE informs MI of its abandonment, and WAVE shall remain obliged to pay its respective patent costs share that arise during such [***] months-period.

6.4 Infringement of Patent Rights

The Parties shall inform each other in due time in writing in the event a Party becomes aware of any suspected or actual infringement of the Patent Rights by any Third Party, or any Third Party objection or other action (e.g. opposition, interference, revocation or nullity action) against the Patent Rights. MI shall have the right, but not the obligation, to enforce or defend the Patent Rights against such Third Party in its sole discretion and at its sole expense. MI shall keep WAVE reasonably informed as to its enforcement and defense of the Patent Rights, and WAVE shall have the right to comment on the documents submitted in the course of such action and the right to participate in all substantive strategic discussions with MI regarding such actions. If (A) within [***] months of the written notice above, MI (i) shall have been unsuccessful in persuading the alleged infringer to desist, (ii) shall not have brought and shall not be diligently prosecuting an infringement action, or (iii) has not entered into settlement discussions with respect to such infringement, or (B) in the event that MI does not intend to enforce or defend the Patent Rights, then WAVE (and ISIS) will have the right, but not the obligation, to individually or jointly (together with ISIS) enforce or defend the Patent Rights against such Third Parties at its or their respective sole cost and expense, but in coordination with MI. MI shall promptly inform WAVE of this intent to not enforce or defend the Patent Rights pursuant to (B) above, but in no case less than the earlier to occur of (i) the expiration of such [***] month period or (ii) [***] days prior to any deadline (unless impossible under the circumstances, in which case MI will provide such notice as soon as possible). In any case, the Parties shall negotiate in good faith how to proceed best, and the Parties shall enter into a separate agreement regarding the allocation of responsibilities (including the initiation, performance and termination of mediation, arbitration or litigation, and the entering of settlements), costs and recoveries in connection with any enforcement or defense of the Patent Rights. Notwithstanding the foregoing, (i) MI shall consult with WAVE prior to entering into any settlement, consent judgment or other voluntary disposition and (ii) any settlement, consent judgment or other voluntary disposition of such actions which (1) limits the scope, validity, or enforceability of any Patent Rights, (2) subjects WAVE to any non-indemnified liability, payment obligation, or injunction, or (3) admits fault or wrongdoing on the part of WAVE, must be approved in writing by WAVE.

ARTICLE 7 - INDEMNIFICATION AND INSURANCE

7.1 Indemnification

WAVE shall indemnify, defend, and hold harmless MI, MPG, UMMS, and their respective trustees, officers, faculty, students, employees, and agents and their respective successors, heirs and assigns (collectively the "**Indemnitees**"), against any and all third party claims, suits, actions (including without limitation actions in the form of tort, warranty, or strict liability, demands, judgments, liabilities, losses, damages, costs, fees or expenses (collectively, the "**Claims**'') incurred by or imposed upon any of the indemnitees to the extent resulting from or arising out of (i) any use of the Patent Rights by WAVE, or (ii) any Licensed Product that is developed, made, used, or sold by WAVE, its Affiliates, Sublicensees and Sales Partner pursuant to this Agreement, or (iii) any Third Party use of any such Licensed Product.

For purposes of clarity, in no event will a Co-Exclusive Licensee have obligations to any Indemnitee for Claims resulting from or arising out of any use of the Patent Rights by the other Co-Exclusive Licensee, any Licensed Product that is developed, made, used, or sold by such other Co-Exclusive Licensee, its Affiliates, Sublicensees and Sales Partners, or any Third Party use of any such Licensed Product.

7.2 Procedures

The Indemnitees agree to provide WAVE with written notice of any Claims for which indemnification is sought under this Agreement within [***] days after the Indemnitees have knowledge of such Claims. WAVE agrees, at its own expense, to provide attorneys reasonably acceptable to MI to defend against any such Claims; *provided*, *however*, that any Indemnitee shall have the right to retain its own counsel, at its own expense, if representation of such Indemnitee by the counsel retained by WAVE would be inappropriate because of actual or potential differences in the interests of such Indemnitee and any other Party represented by such counsel. The Indemnitees shall (i) permit WAVE to assume full responsibility to investigate, prepare for and defend against any such Claims (including all decisions relative to litigation, appeal, and settlement), and (ii) assist WAVE, at WAVE's expense, in the investigation, preparation and defense of any such Claims, and (iii) not compromise or settle such Claims without the prior consent of WAVE. WAVE shall keep MI informed of the progress in the defense and disposition of such Claims, and to consult with MI with regard to any proposed settlement.

7.3 Insurance

WAVE shall obtain and carry in full force and effect commercial general liability insurance, including product liability insurance, which shall protect WAVE and the Indemnitees with respect to events covered by Section 7.1 above. The limit of insurance shall not be less than USD [***] per incident. Upon request, WAVE shall provide MI with certificates of insurance evidencing compliance with this Section 7.3.

ARTICLE 8 - CONFIDENTIALITY

8.1 Confidentiality Obligation

This Agreement and any Confidential Information disclosed by a Party to the other Party under this Agreement shall be treated as confidential by the receiving Party during the Term and for 5 (five) years thereafter. The receiving Party shall not use the Confidential Information for any purposes other than those contemplated by this Agreement.

8.2 Permitted Disclosures

A Party may disclose this Agreement and/or Confidential Information received from a disclosing Party under this Agreement:

(a) to Affiliates, Sublicensees, actual or potential collaborators and investors, and Sales Partners, provided that such Affiliates, Sublicensees, actual or potential collaborators and investors and Sales Partner are bound by confidentiality obligations at least as restrictive as those set forth in this Agreement;

(b) to Third Party individuals with a professional obligation of secrecy (e.g. patent attorneys, attorneys-at-law, certified public accountants);

(c) to Regulatory Authorities in connection with filings for Regulatory Approval, provided that such disclosures may be made only to the extent reasonably necessary to make such filings; and

(d) if such disclosure is required by law or regulation (including without limitation by rules or regulations of any securities exchange, e.g. the United States Securities and Exchange Commission), provided that prior to such disclosure, the obligated Party promptly notifies the disclosing Party of such requirement, and provided further that the obligated Party will furnish only that portion of the disclosing Party's Confidential Information that it is legally required to furnish.

Notwithstanding the foregoing, MI may disclose this Agreement and/or the Confidential Information on a confidential basis to MPG, UMMS and to MPI-BC.

ARTICLE 9 - TERM AND TERMINATION

9.1 Term

This Agreement shall come into effect on the Effective Date, and it shall remain in effect until the later of (i) on a country-by-country and Licensed Product-by-Licensed Product basis, the expiration or abandonment of all Patent Rights covering a Licensed Product in such country, or (ii) April 28, 2019, unless earlier terminated in accordance with the termination provisions of this Article 9.

9.2 Voluntary Termination by WAVE

WAVE shall have the right to terminate this Agreement, without any reason, (i) upon at least 90 (ninety) days prior written notice to MI, such notice to state the date at least 90 (ninety) days in the future upon which termination is to be effective, and (ii) upon payment of all amounts due to MI accrued prior to such termination effective date.

9.3 Cessation of Business

If WAVE and all of its Affiliates and Sublicensees cease to carry on business related to this Agreement, WAVE shall inform MI thereof immediately. In such event, WAVE and MI shall each have the right to terminate this Agreement upon 30 (thirty) days prior written notice to each other.

9.4 Change of Control

In the event that a Third Party acquires, by a single transaction or a series of related transactions, more than 50% (fifty percent) of the securities or voting rights of WAVE, WAVE shall provide MI, upon MI's request, with a special written report in reasonable detail on the actual and intended future activities of WAVE to develop and commercialize Licensed Products. If WAVE cannot demonstrate to maintain, after the change of control event, a program to develop and commercialize Licensed Products that is substantially similar or greater in scope to the program of WAVE prior to the change of control event, then MI shall have the right to terminate this Agreement upon 30 (thirty) days prior written notice to WAVE. WAVE shall inform MI promptly of the implementation of any such change of control event.

9.5 Attack on Patent Rights

MI shall have the right to terminate this Agreement upon 30 (thirty) days prior written notice to WAVE, if WAVE (or any of its Affiliates or Sublicensees) attacks, or have attacked or support an attack through a Third Party, the validity of any of the Patent Rights. For the purposes of this Section 9.5, "attack" does not include interference proceedings at the United States Patent and Trademark Office, or appeals related thereto. WAVE will not take affirmative action to

provoke such an interference, however MI recognizes that WAVE may be or may become a licensee to a pending U.S. application of a Third Party that could be deemed to interfere with applications within the Patent Rights.

9.6 Termination for Material Breach

(a) In the event WAVE (i) fails to pay any undisputed amounts due and payable to MI hereunder, and fails to make such payments within 45 (forty-five) days after receiving written notice of such failure, or (ii) commits a material breach of its obligations under this Agreement other than a failure to pay, and fails to cure that breach within 60 (sixty) days after receiving written notice thereof, MI may in each such event terminate this Agreement immediately upon written notice to WAVE.

(b) Notwithstanding the foregoing, if WAVE disputes in good faith the existence or materiality of any such breach or alleged payment failure, and provides notice to MI of such dispute within such 45 (forty-five) day period for alleged payment failures, or within such 60 (sixty) day period for other alleged material breaches, MI shall not have the right to terminate this Agreement in accordance with this Section 9.6 unless and until it has been determined in accordance with Section 10.3 (b) that this Agreement was materially breached by WAVE, and WAVE fails to cure such breach within 30 (thirty) days following such determination. It is understood and acknowledged that during the pendency of such a dispute, all of the terms and conditions of this Agreement shall remain in effect and the Parties shall continue to perform all of their respective obligations hereunder.

9.7 Effect of Termination

Any termination according to this Article 9 shall only terminate this Agreement between MI and the affected Co-exclusive Licensee, and it shall have no impact on the other co-exclusive license agreement, which shall remain in full force and effect. For purposes of clarification, a breach by WAVE will not equal a breach by ISIS and *vice versa.*

The following provisions shall survive the expiration or termination of this Agreement: Articles 1, 3, 5.6 through 5.8, 7, 8, 10 and this Section 9.7. In no event shall the termination of this Agreement release WAVE from the obligation to make any reports and pay any amounts that became due on or before the effective date of termination.

In the event that any license granted to WAVE under this Agreement is terminated, any sublicense under such license granted prior to termination of this Agreement shall remain in full force and effect, provided that (i) the Sublicensee is not then in breach of its sublicense agreement, and (ii) the Sublicensee agrees, in writing within thirty (30) days after the effective date of termination, to be bound to MI as licensor under the terms and conditions of the sublicense agreement, provided that MI shall have no other obligation than to leave the sublicense granted by WAVE in place.

9.8 Insolvency

If WAVE shall become bankrupt, or shall file a petition in bankruptcy, or if the business of WAVE shall be placed in the hands of a receiver, assignee or trustee for the benefit of creditors, whether by the voluntary act of WAVE or otherwise, WAVE shall provide notice thereof to MI and MI may, subject to the effects of and protections of any applicable bankruptcy-related laws, rules, or regulations, terminate this Agreement upon written notice to WAVE. If this Agreement is terminated in accordance with this Section 9.8 with respect to a Co-Exclusive Licensee, Article 2.1 shall apply with respect to the remaining Co-Exclusive Licensee.

ARTICLE 10 - MISCELLANEOUS

10.1 Notice

Any notices required or permitted under this Agreement shall be in English and in writing (by certified or registered mail, or through a major overnight courier, or by facsimile or e-mail), shall specifically refer to this Agreement, and shall be sent to the following addresses or facsimile numbers of the Parties:

If to MI:
Max-Planck-Innovation GmbH
Amalienstrasse 33
80799 Muenchen / Germany
Fax: +49/89/290919-99
E-mail: info@max-planck-innovation.de

If to WAVE:
Wave Life Sciences PTE, Ltd.
419 Western Avenue
Boston, Massachusetts 02135, USA
Fax: +1.617.206.4831
E-mail: [***]

A Party may change its contact information immediately upon written notice to the other Party in the manner provided in this Section.

10.2 Governing Law

This Agreement and all disputes arising out of or related to this Agreement, or the performance, enforcement, breach or termination hereof, and any remedies relating thereto, shall be construed, governed, interpreted and applied in accordance with the laws of the Federal Republic of Germany, without regard to the conflicts of laws provisions thereof, except that questions affecting the construction and effect of any patent shall be determined by the law of the country in which the patent shall have been granted.

10.3 Dispute Resolution

(a) The Parties shall attempt to settle any dispute or claim arising out of or relating to this Agreement by good faith negotiations. If the Parties fail to agree on a reasonable settlement within [***] ([***]) days after the affected Party informed the other Party in writing of such dispute or claim, either Party may initiate a binding arbitration procedure administered by the American Arbitration Association in accordance with its International Arbitration Rules. The number of arbitrators shall be three, the place of arbitration shall be London, UK, and the language of the arbitration shall be English. German substantive law shall be applied. The award of the arbitrators shall be the sole and exclusive remedy between the affected Parties regarding any such dispute or claim. An award rendered in connection with arbitration pursuant to this Section 10.3 shall be final and binding upon the affected Parties.
Nothing in this Section 10.3 shall be construed as limiting in any way the right of a Party to seek an injunction or interlocutory relief with respect to any actual or threatened breach of this Agreement.

(b) Expedited Review of Disputes Regarding Material Breach

If the Parties are in dispute as to whether WAVE is in material breach of this Agreement according to Section 9.6, then the arbitrators will first determine if material breach has in fact occurred according to an expedited arbitration review process taking no longer than [***] days to make a definitive determination as to the existence and/or materiality of the alleged breach, and if so, will grant WAVE the cure period of [***] days provided pursuant to Section 9.6 (b). During such cure period, the arbitration will continue, and if the material breach is not cured within such cure period, the arbitrator may, as part of the same arbitration, award actual direct damages to MI, in addition to any other remedies MI may have.

10.4 Assignment and Transfer

This Agreement is personal to WAVE, and neither this Agreement nor any rights or obligations may be assigned or otherwise transferred by WAVE to a Third Party without the prior written consent of MI. Notwithstanding the foregoing, WAVE may assign this Agreement to an Affiliate, or to a Third Party in connection with the merger, consolidation, sale of all or substantially all of its assets or that portion of its business to which this Agreement relates; provided, however, that this Agreement shall immediately terminate if the proposed Third Party assignee fails to agree in writing to be bound by the terms and conditions of this Agreement on or before the effective date of assignment. After the effective date of assignment, the Third Party assignee shall provide MI, upon MI's request, with a special written report in reasonable detail on the actual and intended future activities of the Third Party assignee to develop and commercialize Licensed Products. If the Third Party assignee does not maintain a program to develop and commercialize Licensed Products that is substantially similar in scope to the program of WAVE prior the effective date of assignment, then MI may treat such failure as a material breach in accordance with Section 9.6.

10.5 Amendment and Waiver

This Agreement may be amended, supplemented, or otherwise modified only by means of a written instrument signed by all Parties. Any waiver of any rights or failure to act in a specific instance shall relate only to such instance and shall not be construed as an agreement to waive any rights or fail to act in any other instance, whether or not similar.

10.6 Severability

Should one or more of the provisions of this Agreement be held void, invalid or unenforceable under applicable law, the remaining provisions of this Agreement will not cease to be effective. The Parties shall negotiate in good faith to replace such void, invalid or unenforceable provision by a new provision that reflects, to the extent possible, the original intent of the Parties.

10.7 Headings

All headings are for convenience only and shall not affect the meaning of any provision of this Agreement.

10.8 Entire Agreement

This Agreement contains the entire understanding of the Parties with respect to the subject matter hereof, and any previous agreements and understandings, whether oral or written, made by the Parties on the same subject matter are expressly superseded by this Agreement.

10.9 Force Majeure

Neither Party will be deemed to be in default of this Agreement for failure or delay of the performance of its obligations or attempts to cure any breach of this Agreement, when such failure or delay is caused by or results from causes beyond the reasonable control of or not reasonably avoidable by the affected Party, including, without limitation, embargoes, acts of war, strikes, lockouts or other labor disturbances, or acts of God. The affected Party will notify the other Parties of such force majeure circumstances as soon as reasonably practical and will make every reasonable effort to mitigate the effects of such force majeure circumstances. In case of such a force majeure event, the time for performance or cure will be extended for the period equal to the duration of such force majeure event, but not in excess of 6 (six) months.

10.10 Relationship of the Parties

It is expressly agreed that MI and WAVE will be independent contractors and that the relationship among the Parties will not constitute a partnership, joint venture or agency. Specifically, and not to limit the foregoing, with respect to each Co-exclusive Licensee, (i) the rights and obligations contained in this Agreement shall, except as expressly stated otherwise, apply to each Co-exclusive Licensee individually, and not jointly and severally, and (ii) neither

Co-exclusive Licensee has the authority to make any statements, representations or commitments of any kind, or to take any action under this Agreement, which will be binding on the other.

10.11 Press Release

No Party may make public announcements with respect to the specific terms of this Agreement without the prior written approval of the other Parties, not to be unreasonably withheld; *provided*, *however*, that no such approval will be required for public announcements or other disclosures regarding the fact that this Agreement was executed by the Parties or a general description of the subject matter of this Agreement. Each Party shall provide to the other Parties a copy of any such public announcement for review and approval as soon as reasonably practicable under the circumstances, but not less than one week, prior to its scheduled release. If the Parties do not refuse their respective approval during such period for good cause, then their approval shall be deemed to be granted.

In witness whereof, the Parties have caused this Agreement to be executed by their duly authorized representatives.

Max-Planck-Innovation GmbH	Wave Life Sciences PTE, Ltd.
By: /s/ Joern Erselius	By: /s/ Paul B. Bolno
Name: Dr. Joern Erselius	Name: Paul Bolno M.D.
Title: Geschäftsführer/Managing Director	Title: President and CEO
Date: June 8th, 2015	Date: May 27th, 2015

APPENDIX A

Patent Rights
([***])

*****Text Omitted and Filed Separately with the Securities and Exchange Commission. Confidential Treatment Requested 17 C.F.R. Section 200.80(b)(4) and Rule 406 of the Securities Act of 1933, as amended.**

[***]

*****Confidential Treatment Requested*****

Exhibit 10.11

DEED OF INDEMNITY

This Deed is made the day of

BETWEEN

(1) Wave Life Sciences Pte. Ltd. (Company Registration Number 201218209G) a company duly incorporated in Singapore with its registered address at 8 Cross Street, #10-00 PWC Building, Singapore 048424 (the "**Company**");

AND

(2) **[NAME OF DIRECTOR OR OFFICER] [RESIDENTIAL/BUSINESS ADDRESS]** (the "**Indemnitee**");

WHEREAS:-

A. The Company desires and has requested the Indemnitee to serve or continue to serve as a director or officer ("**Director**" or "**Officer**") of the Company.

B. The Indemnitee is willing to serve, or to continue to serve, the Company in the aforementioned capacity subject to the execution and delivery by the Company of this Deed.

NOW THIS DEED WITNESSETH THAT IN CONSIDERATION OF THE PREMISES:-

1. Agreement to Serve. The Indemnitee hereby accepts the appointment as a Director or Officer of the Company and, so long as the Indemnitee continues to be a Director or Officer of the Company, the Indemnitee shall, within the limits imposed by law, exercise all functions required by the Articles of Association of the Company (the "**Articles**") while observing to the best of the Indemnitee's ability the interests of the Company.

2. Indemnification. Subject to, and to the maximum extent permitted by the Articles, the Companies Act (Chapter 50 of Singapore), as amended from time to time (the "**Act**") or other applicable law, the Company does hereby covenant and agree to hold harmless and indemnify the Indemnitee as from the date of appointment of the Indemnitee as a Director or Officer from and against all matters of whatsoever nature and howsoever arising by reason of or in connection with the Indemnitee's provision of services under clause 1 above ("**Claims**"). In addition to and not in limitation of the indemnification otherwise provided for herein, and subject only to the exclusions set forth in clause 7 hereof, the Company hereby further agrees to hold harmless and indemnify Indemnitee against any and all expenses (including attorneys' fees), witness fees, damages, judgments, fines and amounts paid in settlement and any other amounts that Indemnitee becomes legally obligated to pay in connection with any threatened, pending or completed action, suit or proceeding, whether civil, criminal, arbitrational, administrative or investigative (including, without limitation, an action by or in the right of the Company, and also including, without limitation, a claim, demand, discovery request, formal or informal investigation, inquiry, administrative hearing, and any form of alternative

dispute resolution), including an appeal from any of the foregoing (with each of the foregoing, and any appeal therefrom, being referred to as a "**Proceeding**"), to which Indemnitee is, was or at any time becomes a party, or is threatened to be made a party, by reason of the fact that Indemnitee is, was or at any time becomes a director, officer, auditor, secretary, employee or agent of the Company, or is or was serving or at any time serves at the Company's request as a director, officer, employee or other agent of another company, partnership, joint venture, trust, employee benefit plan or other enterprise.

3. Partial Indemnification. Notwithstanding any other provision of this Deed, to the extent that Indemnitee is a party to and is successful, on the merits or otherwise, in any Proceeding, Indemnitee shall be indemnified to the maximum extent permitted by law against all expenses, liabilities, and other amounts described in clause 2 (collectively, the "**Expenses**") actually and reasonably incurred by Indemnitee or on Indemnitee's behalf in connection therewith. To the extent that Indemnitee is not wholly successful but is successful, on the merits or otherwise, as to one or more but less than all claims, issues or matters in any Proceeding, then the Company shall indemnify Indemnitee against all Expenses actually and reasonably incurred by Indemnitee or on Indemnitee's behalf in connection with each successfully resolved claim, issue or matter.

4. Indemnification for Expenses of Witness. Notwithstanding any other provision of this Deed, to the extent that Indemnitee is, by reason of Indemnitee's status as a director, officer, agent or employee of the Company, a witness, or is made to asked to respond to discovery requests, in any Proceeding to which Indemnitee is not a party, Indemnitee shall be indemnified against all Expenses actually and reasonably incurred by Indemnitee or on Indemnitee's half in connection therewith.

5. Advancement of Expenses. Notwithstanding any other provision of this Deed, the Company shall advance all Expenses incurred by or on behalf of Indemnitee in connection with any Proceeding by reason of Indemnitee's status as a director, officer, agent or employee of the Company within thirty (30) days after the receipt by the Company of a statement or statements from Indemnitee requesting such advance or advances from time to time, whether prior to or after final disposition of such proceeding. Such statement or statements shall reasonably evidence the Expenses incurred by Indemnitee and shall include or be preceded or accompanied by a written undertaking by or on behalf of Indemnitee and shall include or be preceded or accompanied by a written undertaking by or on behalf of Indemnitee to repay any Expenses advanced if it shall ultimately be determined that Indemnitee is not entitled to be indemnified against such Expenses. Any advances and undertaking to repay pursuant to this clause 5 shall be unsecured and interest-free.

6. Survival of Rights. All the rights and privileges afforded by this Deed, including the right to indemnification and the advancement of legal fees and expenses provided under this Deed, to the extent permissible by law, shall continue as to Indemnitee for any action taken or not taken while serving in an indemnified capacity even though Indemnitee may have ceased to serve in such capacity at the time of any Proceeding.

7. Request for Indemnification. Whenever Indemnitee believes that the Indemnitee is entitled to indemnification pursuant to this Deed, the Indemnitee shall submit a written request for

indemnification to the Company. Any request for indemnification shall include sufficient documentation or information reasonably available to Indemnitee for the determination of entitlement to indemnification. In any event, Indemnitee shall submit Indemnitee's claim for indemnification within a reasonable time, not to exceed one year after becoming aware of the circumstances giving rise to the Indemnity's entitlement to indemnification.

8. Exceptions to Indemnification. Notwithstanding anything in this Deed to the contrary, the Company will not provide indemnity with respect to any Claim:

   (a) settled without the Company's consent, which consent, however, shall not be unreasonably withheld;

   (b) in respect of any liability that cannot be indemnified by reason of section 172 of the Act or other applicable law;

   (c) in connection with any claims, threats, or suits commenced by Indemnitee (other than any claims, threats, or suits commenced by Indemnitee to enforce Indemnitee's rights under this Deed) unless the commencement of such claims, threats, or suits was authorized by the Board of Directors;

   (d) on account of any determination or judgment against Indemnitee solely for an accounting of profits made from the purchase or sale by Indemnitee of securities of the Company pursuant to the provisions of Section 16(b) of the United States Securities Exchange Act of 1934 and amendments thereto or similar provisions of any United States federal, state or local statutory law;

   (e) on account of Indemnitee's conduct to the extent that it is established by a final, non-appealable judgment as knowingly fraudulent or deliberately dishonest or that constituted willful misconduct; or

   (f) on account of Indemnitee's conduct to the extent that it is established by a final, non-appealable judgment as constituting a breach of Indemnitee's duty of loyalty to the Company or resulting in any personal profit or advantage to which Indemnitee was not legally entitled.

9. Subrogation. In the event of payment under this Deed, the Company shall be subrogated to the extent of such payment to all of the rights of recovery of the Indemnitee, who shall execute all papers required and shall do everything that may be necessary to secure such rights, including the execution of such documents necessary to enable the Company effectively to bring suit to enforce such rights.

10. Directors and Officers Liability Insurance. The Company agrees that so long as Indemnitee serves as a director and/or officer of the Company, and for so long thereafter as Indemnitee shall be subject to any possible Claim, by reason of the fact that the Indemnitee was serving in the capacity referred to herein (the "**Indemnification Period**"), the Company will maintain directors' and officers'

insurance for the benefit of the Indemnitee with established and reputable insurers, at coverage levels customary for companies comparable in size and business to the Company, and providing the same rights and benefits as are accorded the Company's and its subsidiaries' then-current directors and officers. Upon receipt of notice of any Proceeding, the Company shall give or cause to be given prompt notice of such proceeding to all insurers providing liability insurance in accordance with the procedures set forth in all applicable or potentially applicable policies. The Company shall thereafter take all necessary action to cause such insurers to pay all amounts payable in accordance with the terms of such policies.

11. Indemnification Procedures. The Indemnitee shall promptly notify the Company in writing upon being served with any document relating to a potential Claim that may result in the right to indemnification, but the omission so to notify the Company will not relieve it from any liability that it may have to Indemnitee if such omission does not prejudice the Company's rights. If such omission does prejudice the Company's rights, the Company will be relieved from liability only to the extent of such prejudice. Notwithstanding the foregoing, such omission will not relieve the Company from any liability that it may have to Indemnitee otherwise than under this Deed. With respect to any Claim as to which Indemnitee notifies the Company of the commencement thereof:

(a) the Company will be entitled to participate therein at its own expense;

(b) the Company jointly with any other indemnifying party similarly notified will be entitled to assume the defence thereof. After notice from the Company to Indemnitee of its election to assume the defence thereof, the Company will not be liable to Indemnitee under this Deed for any expenses subsequently incurred by Indemnitee in connection with the defence thereof, other than reasonable costs of investigation or otherwise as provided below. Indemnitee shall have the right to employ separate counsel in such action, suit or proceeding, but the fees and expenses of such counsel incurred after notice from the Company of its assumption of the defence thereof shall be at the expense of Indemnitee unless (i) the Company authorizes Indemnitee's employment of separate counsel, (ii) Indemnitee reasonably concludes, and so notifies the Company, that there is an actual conflict of interest between the Company and Indemnitee in the conduct of the defence of such action, or (iii) the Company shall not in fact have employed counsel to assume the defence of such action, in each of which cases the fees and expenses of Indemnitee's separate counsel shall be at the Company's expense. The Company shall not be entitled to assume the defence of any action, suit or proceeding brought by or on behalf of the Company or as to which Indemnitee shall have made the conclusion provided for in clause (ii) above;

(c) the Company shall not settle any Claim in any manner that would impose any penalty or limitation on Indemnitee without Indemnitee's written consent provided that Indemnitee will not unreasonably withhold his or her consent to any proposed settlement; and

(d) the Company shall advance the legal fees and expenses Indemnitee incurs in connection with such proceeding in accordance with clause 5 above; and

(e) nothing in this clause 11 shall entitle Indemnitee to any indemnification, reimbursement or payment other than in accordance with section 172 of the Act and applicable law.

12. Notices. All notices, requests, demands and other communications hereunder shall be in writing and shall be deemed to have been duly given if (i) delivered by hand and receipted for by the party to whom said notice or other communication shall have been directed, or (ii) mailed by certified or registered mail with postage prepaid, on the third business day after the date on which it is so mailed:

(a) If to Indemnitee, to:

_____

_____

_____

_____

(b) If to the Company, to:
Wave Life Sciences Pte. Ltd.
419 Western Avenue
Boston, MA 02135
USA

or to such other address as may have been furnished to Indemnitee by the Company or to the Company by Indemnitee, as the case may be.

13. Effective Period. This Deed shall be deemed to be effective as of the commencement date of the Indemnitee's service as a director or officer of the Company and shall continue in effect during the Indemnification Period.

14. Amendment and Termination. The terms of this Deed may be changed, waived, discharged or terminated only by an instrument in writing signed by all parties.

15. Non-Waiver. The failure of any party to insist in any one or more cases upon the strict performance of any provisions hereof shall not be a waiver or relinquishment for the future of such provisions, and receipt by any part of any payment or benefit with knowledge of any default or breach by any other party shall not be a waiver of such default or breach. No delay by any party in exercising any of its or the Indemnitee's powers or remedies hereunder or a partial or single exercise thereof shall constitute a waiver thereof or a waiver of any power or remedy. The failure by any party to give notice to any other party of any breach hereof shall not constitute a waiver of the said breach.

16. Severability. The provisions of this Deed shall be severable, and if any provision or part thereof of this Deed shall be, or be found by any court of competent jurisdiction to be, invalid or unenforceable, the invalidity or unenforceability of such provision shall not affect any other provision hereof or the enforceability or validity of that or any other provision in any other jurisdiction.

17. Presumptions and Burden of Proof. The following procedures and presumptions shall apply in the event of any question as to whether Indemnitee is entitled to indemnification under this Deed:

(a) In making a determination with respect to entitlement to indemnification hereunder, the person or persons or entity making such determination shall presume that Indemnitee is entitled to indemnification under this Deed. Anyone seeking to overcome this presumption shall have the burden of proof and the burden of persuasion by clear and convincing evidence.

(b) It shall be presumed that Indemnitee has at all times acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the Company. Anyone seeking to overcome this presumption shall have the burden of proof by clear and convincing evidence.

(c) In the event that any action, claim or Proceeding to which Indemnitee is a party is resolved in any manner other than by adverse judgment against Indemnitee (including, without limitation, settlement of such action, claim or Proceeding with or without payment of money or other consideration), it shall be presumed that Indemnitee has been successful on the merits or otherwise in such action, suit or Proceeding. Anyone seeking to overcome this presumption shall have the burden of doing so by clear and convincing evidence.

(d) The termination of any Proceeding, or of any claim, issue or matter therein, by judgment, order, settlement or conviction, or upon a plea of nolo contendere or its equivalent, shall not (except as otherwise expressly provided in this Deed) of itself adversely affect the right of Indemnitee to indemnification or create a presumption that Indemnitee did not act in good faith and in a manner which he reasonable believed to be in or not opposed to the best interests of the Company or, with respect to any criminal proceeding, that Indemnitee had reasonable cause to believe that his conduct was unlawful.

18. Non-Exclusivity. The rights conferred on Indemnitee by this Deed shall not be exclusive of any other right which Indemnitee may have or hereafter acquire under any applicable law, under the Articles, Bylaws, other organizational document of the Company, under any agreement, insurance policy, or vote of stockholders, members or directors, or otherwise, both as to action in Indemnitee's official capacity and as to action in another capacity while holding office.

19. **[**Primacy of Indemnification. The Company hereby acknowledges that Indemnitee has certain rights to indemnification, advancement of expenses, and/or insurance provided by **[Names of Funds/Sponsors]** and certain of their affiliates (collectively, the "Fund Indemnitors"). The Company hereby agrees (i) that it is the indemnitor of first resort (i.e., its obligations to Indemnitee are primary, and any obligation of the Fund Indemnitors to advance expenses or to provide indemnification for the same expenses or liabilities incurred by Indemnitee are secondary); (ii) that it shall be required to advance the full amount of expenses incurred by Indemnitee and shall be liable for the full amount of all Expenses, judgments, penalties, fines and amounts paid in settlement to the extent legally permitted and as required by the terms of this Deed and the Articles or Bylaws of the

Company (or any other agreement between the Company and Indemnitee), without regard to any rights Indemnitee may have against the Fund Indemnitors; and (iii) that it irrevocably waives, relinquishes and releases the Fund Indemnitors from any and all claims against the Fund Indemnitors for contribution, subrogation or any other recovery of any kind in respect thereof. The Company further agrees that no advancement or payment by the Fund Indemnitors on behalf of Indemnitee with respect to any claim for which Indemnitee has sought indemnification from the Company shall affect the foregoing, and the Fund Indemnitors shall have a right of contribution and/or be subrogated to the extent of such advancement or payment to all of the rights of recovery of Indemnitee against the Company. The Company and Indemnitee agree that the Fund Indemnitors are express third-party beneficiaries of the terms of this clause **[19].] [Note: This paragraph will apply only to the directors that are appointed to the Board by the Fund Indemnitors.]**

20. Additional Indemnification Regarding Expenses. Without limiting the foregoing, in the event of an action instituted by or in the name of the Company under this Deed or to enforce or interpret any of its terms, Indemnitee shall be entitled, to the extent permissible by law, to be paid all court costs and expenses, including attorneys' fees, incurred by Indemnitee in defense of such action (including with respect to Indemnitee's counterclaims and cross-claims made in such action), unless as a part of such action the court determines that each of Indemnitee's material defenses to such action were made in bad faith or were frivolous.

21. Termination of Indemnitee's Office. Nothing in this Deed shall be construed as requiring the Company to retain the Indemnitee in the office hereinbefore described, or as in any way restricting its rights to remove the Indemnitee from office, or as requiring the Indemnitee to remain in office in the event that the Indemnitee wishes to resign from or relinquish such office.

22. Duration of Agreement. The rights conferred on the Indemnitee by this Deed shall continue after the Indemnitee has ceased to be a director, officer, employee or other agent of the Company or to serve at the request of the Company as a director, officer, employee or other agent of another company, partnership, joint venture, trust, employee benefit plan or other enterprise, and shall inure to the benefit of the Indemnitee's successors, assigns, heirs, executors and administrators.

23. Successors and Assigns. This Deed shall be binding upon the Company and its successors and assigns. The Company shall require any successor (whether direct or indirect, by purchase, merger, consolidation or otherwise) to all or substantially all of the business or assets of the Company, expressly to assume and agree to perform this Deed in the same manner and to the same extent the Company would be required to perform if no such succession had taken place.

24. Entire Agreement and Integration. This Deed shall contain the entire Deed among the parties with respect to the subject matter hereof and supersede all prior Deeds, written or oral, with respect thereto.

25. Counterparts. This Deed may be executed in one or more counterparts, each of which shall for all purposes be deemed to be an original, but all of which together shall constitute one and the same Deed.

26. Third-Party Beneficiaries. Except as provided in clause 19, a person who is not a party to this Deed shall have no right under the Contracts (Rights of Third Parties) Act (Chapter 53B) to enforce any of its terms.

27. Headings. The headings of the clauses of this Deed are inserted for convenience only and shall not be deemed to constitute part of this Agreement or to affect its interpretation and construction.

28. Governing Law and Consent to Jurisdiction. This Deed shall be construed in accordance with and governed by the laws of Singapore, without regard to its conflict-of-laws rules. The parties hereto agree to submit to the non-exclusive jurisdiction of the courts of Singapore for purposes of any action or proceeding arising out of or in connection with this Deed.

IN WITNESS WHEREOF the parties hereto have executed this Deed on the date first set forth above.

The Common Seal of)
Wave Life Sciences Pte. Ltd.)
was affixed hereto)

Paul B. Bolno, Chief Executive Officer & Director

Director/Secretary

Signed, sealed and delivered
by **[NAME OF DIRECTOR OR OFFICER]**)

Indemnitee: [Name of Director or Officer]

in the presence of :)

Name:
Address:

Exhibit 10.12

Dec 12, 2013

Dr. Paul Bolno
[Address]

Dear Dr. Bolno:

I am pleased to offer you a position with **WAVE LIFE SCIENCES PTE. LTD.**, a company organized under the laws of Singapore (the "**Company**"), as its **President** and **Chief Executive Officer**. As President and Chief Executive Officer, you shall use all proper means in your power to improve, develop, extend, maintain, advise and promote the Company's business and to protect and further the reputation, interests and success of the Company and its affiliates (the "**Group Companies**" and each, a "**Group Company**"). It is anticipate that you will render your duties from the United States, which shall include (but are not in any way restricted or limited to):

(a) undertaking such duties (which may include assuming such other executive or management positions in the Company or any of Group Company) and exercise such powers in relation to the Company and its business at such place as the Company's board of directors (the "**Board**") may from time to time assign to or vest in you;

(b) devoting substantially the whole of your time and attention during business hours to the discharge of your duties hereunder;

(c) in the discharge of such duties and in the exercise of such powers observing and complying with all resolutions and all reasonable and lawful directions from time to time made or given by the Board;

(d) serving the Company faithfully and diligently to the best of your ability;

(e) using all reasonable efforts to promote the interests of the Company;

(f) acting in the Company's best interests;

(g) advising the Company immediately if you becomes aware of or suspect any unlawful act or omission by any director, officer, employee or contractor of the Company;

(h) in pursuance of your duties hereunder performing such services for any existing or future Group Company and without further remuneration (unless otherwise agreed) accepting such offices in any such companies as the Board may from time to time reasonably require;

(i) other duties as assigned to you by the Board from time to time; and

(j) without limiting your duties to the Company, you must not act in conflict with the Company's best interests, or disparage the Company or any other Group Company.

As the Company's President and Chief Executive Officer, you will receive a monthly Base Salary of $37,500.00 US ("**Base Salary**"), which will be paid semimonthly in accordance with the Company's normal payroll procedures. As an employee, you will also be eligible to receive certain employee benefits including: (i) medical, dental, vision, and pharmaceutical coverage, which are provided at no charge to you and are available to your family for a small fee (note that Actual costs to cover your qualified dependents will vary based on the relationship and number of dependents); (ii) life insurance in the amount of fifty thousand dollars ($50,000); (iii) short term and long term disability insurance paid for by the Company; (iv) participation in a Flexible Spending Account program; and (v) access to the Company's Employee Assistance Program. You should note that the Company may modify benefits from time to time as it deems necessary.

If you decide to join the Company, and subject to the approval of the Board and the completion of any other necessary corporate procedures, within 60 days, or a reasonable number days as may be required under the circumstances, following the earlier of (i) the completion of the Company's next equity financing or (ii) April 1, 2014, the Company shall grant you a restricted share award for a number of shares of the Company's ordinary share capital in amount equal to 7.5% of the Company's issued and paid-up share capital as of the earlier of (a) the date immediately following the closing of such financing or (b) the date of grant of the share award (the "**Shares**"). Twenty-five percent (25%) of the Shares shall vest twelve (12) months after your start date subject to your continuing employment with the Company, and no Shares shall vest before such date. The remaining Shares shall vest over the next thirty-six (36) months in equal monthly amounts subject to your continuing employment with the Company.

In addition to the vesting of Shares described in the paragraph above, in the event you are responsible for securing for the Company a Qualifying Strategic Partnership (defined below) pursuant to a binding long-form written agreement within the first year of your employment with the Company, twelve and one half percent (12.5%) of the Shares shall immediately vest upon the date the Company executes such agreement. For purposes of this letter, a "**Qualifying Strategic Partnership**" shall mean either (1) a strategic partnership, joint development, joint venture or other similar arrangement with the Company negotiated by you and memorized in a binding written agreement where the counterparty is a major pharmaceutical or biotechnology company that is traded publicly as of the date the Company enters into the applicable Qualifying Strategic Partnership or (2) a strategic partnership, joint development, joint venture or other arrangement with the Company negotiated by you and memorized in a binding written agreement pursuant to which the counterparty either (i) commits a minimum of $10,000,000 of development and/or marketing funds to the Company, (ii) agrees to pay a license fee to the Company in excess of $5,000,000 over the first 2 years of the license term, (iii) agrees to a revenue sharing or royalty arrangement with the Company through which the Company reasonably anticipates receiving at least $5,000,000 of income over the first 2 years of its term. The parties agree that whether any contractual agreement constitutes a "Qualifying Strategic Partnership" shall be determined by the Board in its reasonable and good faith discretion.

In the event you cease to be employed by, or terminate your employment with, the Company, then all unvested Shares will thereupon be forfeited and automatically transferred to and reacquired by the Company at no cost to the Company upon the date of such termination and you will have no further rights thereunder. It will also be recommended to the Board that your Shares include accelerated vesting that provides that in the event that you are terminated by the Company without Cause (as defined below) within twelve (12) months following a change of control, one hundred percent (100%) of the total number of any unvested Shares shall be deemed fully vested and immediately exercisable. The Shares will be subject to the terms and conditions of a restricted share award agreement, including vesting requirements.

As additional compensation for your services, as the Company's Chief Executive Officer, you will be eligible to earn an annual performance bonuses in amount equal to up to 25% of your Base Salary in any calendar year (each a "**Performance Bonus**"). The amount of each Performance Bonus, if any, will be subject to achievement of annual performance milestones to be determined by the Board in its sole discretion after consultation with Dr. Ryoich Nagata. Performance Bonuses are not earned until paid and you must be continuously employed through the date of payment to be eligible to earn the Performance Bonus.

Except as may be required by applicable U.S. federal and state law, you shall be fully liable for the payment of income tax payable in respect of any remuneration received from the Company.

The determination of whether any performance or financial targets have been achieved (including, but not limited to, those set forth above in respect of any Performance Bonus) shall be made by the Board in its sole discretion acting in good faith. Any Performance Bonuses, less applicable withholdings, will be paid to you by the Company as soon as practicable after the Board determines, in its sole discretion, that any such bonus has been earned, but in no event later than March 15 following the calendar year in which such bonus is earned. The Company will review your Base Salary on an annual basis, typically in January. The Company may, in its sole discretion, adjust the Base Salary or any bonuses.

Nevertheless, subject to the terms and conditions of this letter, your employment with the Company constitutes "at-will" employment and the Company may at any time terminate your employment with the Company for any reason or no reason, with or without Cause (as defined below). Similarly, you are free to resign at any time, for any reason or for no reason. We request that, in the event of resignation, you give the Company at least two weeks' prior notice.

If the Company terminates your employment without Cause, then, subject to the provisions of **Exhibit A**, you shall be entitled to receive only: (i) any earned but unpaid Base Salary, as of the date of termination, (ii) reimbursement for all reasonable and necessary expenses incurred by you in connection with your performance of services on behalf of the Company, as of the date of termination (subject to providing reasonable documentation of such expenses), payable in accordance with applicable Company policies and procedures, (iii) continued payment of your then current Base Salary for twelve (12) months from the date your employment is terminated, less applicable withholdings, paid in accordance with the Company's

regular payroll procedures, and (iv) no other payments, severance, or benefits, including, but not limited to, payments under any express or implied Company severance policy. Any severance payments made under the paragraph shall be the maximum severance benefits available to you and shall be coordinated with and reduced by the amount of any notice pay that may be required pursuant to federal, state or local law, including the Worker Adjustment and Retraining Notification Act ("**WARN**"). You acknowledge and agree that the severance benefits provided in this paragraph satisfy and exceed any required notice pay under WARN or similar acts.

If the Company terminates your employment for Cause, or upon your voluntary resignation for any reason, or upon termination of your employment as a result of your death or Disability (as defined below), then, subject to your execution and delivery to the Company of a full and unconditional customary general release in favor of the Company, and provided such release becomes effective no later than sixty (60) days following your termination, you shall be entitled to receive only: (i) any earned but unpaid Base Salary, as of the date of termination, (ii) reimbursement for all reasonable and necessary expenses incurred by you in connection with your performance of services on behalf of the Company, as of the date of termination (subject to providing reasonable documentation of such expenses), payable in accordance with applicable Company policies and procedures, and (iii) no other payments, severance, or benefits, including, but not limited to, payments under any express or implied Company severance policy.

For purposes of this letter, "**Cause**" is defined as: (i) an act of dishonesty made in connection with your responsibilities as an employee; (ii) a conviction of, or plea of nolo contendere to, a felony or any crime involving fraud, embezzlement or any other act of moral turpitude; (iii) gross misconduct; (iv) unauthorized use or disclosure of any proprietary information or trade secrets of the Company or any other party to whom you owe an obligation of nondisclosure as a result of your relationship with the Company; (v) termination due to the Company becoming insolvent (e.g., the inability to pay its debts generally as they mature) on or after the six (6) month anniversary of the date first written above; (vi) willful breach of any obligations under any written agreement or covenant with the Company; or (vii) your continued failure to perform employment duties after you have received a written demand of performance from the Company which specifically sets forth the factual basis for the Company's belief that you have not substantially performed your duties and you have failed to cure such non-performance to the Company's satisfaction within 10 business days after receiving such notice. For purposes of this letter, "**Disability**" is defined as your incapacity, due to physical or mental illness or disability, to perform the essential functions of your position for the Company, for more than ninety (90) days out of any rolling one year period unless a longer period is required by law, in which case the longer period will be applied.

The Company reserves the right to conduct background investigations and/or reference checks on all of its potential employees. For purposes of federal immigration law, you will be required to provide to the Company documentary evidence of your identity and eligibility for employment in the United States. Such documentation must be provided to us within three (3) business days of your date of hire, or our employment relationship with you may be terminated.

As an employee, you shall consent to the Company obtaining, holding and processing data relating to you for legal, personnel, administrative and management purposes including, without limitation, any sensitive personal data relating to you including, as appropriate:

(i) information about your physical or mental health or condition in order to monitor sick leave and take decisions as to your fitness for work;

(ii) your racial or ethnic origin or religious or similar beliefs in order to monitor compliance with equal opportunities legislation; and

(iii) information relating to any criminal proceedings in which you have been involved for insurance purposes and in order to comply with legal requirements and obligations to third parties.

You shall further consent to (i) the Company making such data or information available to any Group Company, those who provide products or services to the Company or any Group Company (such as advisers), regulatory authorities, governmental or quasi governmental organizations and potential purchasers of the Company or any part of its business; and (ii) the transfer of such data or information to the Company's or any Group Company's business contacts outside Singapore in order to further its or their business interests.

During your employment with the Company and for a period of one (1) year after the termination of your relationship with the Company ("**Restricted Period**") for any reason, whether voluntary or involuntary and with or without cause, you agree not to, whether paid or unpaid: (1) serve as a partner, principal, licensor, licensee, employee, consultant, officer, director, manager, agent, affiliate, representative, advisor, promoter, associate, investor, or otherwise for; (2) directly or indirectly, own, purchase, organize or take preparatory steps for the organization of; or (3) build, design, finance, acquire, lease, operate, manage, control, invest in, work or consult for or otherwise join, participate in or affiliate yourself with, any business whose business, products or operations are in any respect competitive with or otherwise similar to the Company's nucleic acid drug related businesses or any disease areas in the Company's development pipelines. The foregoing covenant shall cover your activities in every part of the Territory. "**Territory**" shall mean (i) all counties in the Commonwealth of Massachusetts; (ii) all other states of the United States of America; and (iii) any other countries outside the United States of America. The noncompetition covenant set forth in this paragraph shall terminate and be of no further force or effect in the event that you are terminated without Cause within six (6) months of the date of this offer letter due to the Company becoming insolvent as a result of the Company's inability to secure and close financing during such 6 month period.

You further agree that during the Restricted Period, whether you resign voluntarily or are terminated by the Company involuntarily, you shall not contact, or cause to be contacted, directly or indirectly, or engage in any form of oral, verbal, written, recorded, transcribed, or electronic communication with any Customer for the purposes of conducting business that is competitive or similar to that of the Company (as defined above) or for the purpose of disadvantaging the Company's business in any way. For the purposes of this Agreement,

"**Customer**" shall mean all persons or entities that have used or inquired of the Company's services at any time during the two-year period preceding the termination of your relationship with the Company. You further agree that if you wish to engage in any outside employment, occupation, consulting or other business activity during the time of your employment with the Company, you must submit a written request to the Company explaining the details of such activity so that the Company may determine whether a conflict exists. The parties acknowledge as of the date hereof you have submitted a letter detailing all such potential conflicts, which is attached hereto as **Exhibit B**.

Additionally, you agree that during the Restricted Period, whether you resign voluntarily or are terminated by the Company involuntarily, you will not directly or indirectly hire, solicit, or recruit, or attempt to hire, solicit, or recruit, any employee of the Company to leave their employment with the Company, nor will you contact any employee of the Company, or cause an employee of the Company to be contacted, for the purpose of leaving employment with the Company.

The noncompetition and nonsolicitation covenants set forth above shall be construed as a series of separate covenants, one for each city, county and state of any geographic area in the Territory. Except for geographic coverage, each such separate covenant shall be deemed identical in terms to the covenant set forth above. If, in any judicial or arbitral proceeding, a court or arbitrator refuses to enforce any of such separate covenants (or any part thereof), then such unenforceable covenant (or such part) shall be revised, or if revision is not permitted it shall be eliminated from this Agreement, to the extent necessary to permit the remaining separate covenants (or portions thereof) to be enforced. In the event that the covenants set forth above are deemed to exceed the time, geographic or scope limitations permitted by applicable law, then such provisions shall be reformed to the maximum time, geographic or scope limitations, as the case may be, then permitted by such law.

As a condition of your employment, you are also required to sign and comply with a Confidential Information, Invention Assignment and Arbitration Agreement (the "**Invention Agreement**") which requires, among other provisions, the assignment of patent rights to any invention made during your employment with the Company, and nondisclosure of Company proprietary information. In the event of any dispute or claim relating to or arising out of our employment relationship with the Company, you and the Company agree that (i) any and all disputes between you and the Company shall be fully and finally resolved by binding arbitration in Boston, Massachusetts , to be administered by the American Arbitration Association ("**AAA**") pursuant to the then-current AAA National Rules for the Resolution of Employment Disputes, (ii) you are waiving any and all rights to a jury trial but all court remedies will be available in arbitration, (iii) all disputes shall be resolved by a neutral arbitrator who shall issue a written opinion, (iv) the arbitration shall provide for adequate discovery, and (v) the arbitrator has the power to award to the substantially prevailing party the reimbursement of such party's reasonable attorneys' fees and costs (including, but not limited to, expert fees) as well as such administrative fees in connection with such arbitration. This letter shall be governed by, and shall be construed under, the laws of the Commonwealth of Massachusetts without regards to conflicts of laws principles.

To accept the Company's offer, please sign and date this letter in the space provided below. A duplicate original is enclosed for your records. This letter and the Invention Agreement set forth the terms of your employment with the Company and supersede any prior representations or agreements including, but not limited to, any representations made during your recruitment, interviews or preemployment negotiations, whether written or oral. This letter, including, but not limited to, its at-will employment provision, may not be modified or amended except by a written agreement signed by the President of the Company and you.

We look forward to your favorable reply and to working with you at **WAVE LIFE SCIENCES PTE. LTD**.

Sincerely,

/s/ Ken Takanashi
Ken Takanashi
Director of the Board

Agreed to and accepted:

Signature: /s/ Paul B. Bolno

Printed Name: Paul B. Bolno

Date: 12/12/13

Enclosures
Duplicate Original Letter
Employment, Confidential Information, Invention Assignment and Arbitration Agreement

Exhibit A

To the extent any severance payments will be made under this letter, such severance payments will be delayed as necessary pursuant to (A) the Release Requirement and (B) the provisions of Section 409A of the of the Internal Revenue Code of 1986, as amended and the final regulations and any guidance promulgated thereunder and any applicable state law equivalents ("**Section 409A**"), each as outlined below.

Release Requirement

The receipt of any severance pursuant to this letter is subject to you signing and not revoking a standard release of claims with the Company in a form approved by the Company (the "**Release**") and provided that such Release becomes effective and irrevocable no later than 60 days following your termination of employment. (such deadline, the "**Release Deadline Date**"). If the Release does not become effective and irrevocable by the Release Deadline Date, you will forfeit any rights to severance under this letter. In no event will severance payments be paid or provided until the Release becomes effective and irrevocable.

Section 409A

(i) This letter and all payments and benefits hereunder are intended to be exempt from or otherwise comply with Section 409A so that none of the severance payments and benefits to be provided hereunder will be subject to the additional tax imposed under Section 409A, and any ambiguities or ambiguous terms herein will be interpreted in that manner. References to your "termination of employment" will refer to your "separation from service" as defined in Section 409A.

(ii) Any severance payments under this letter will be paid on, or, in the case of installments, will not commence until, the Release Deadline Date, or, if later, such time as required by clause (iii) below. Except as required by clause (iii) below, any installment payments that would have been made to you during the 60 day period immediately following your separation from service but for the preceding sentence will be paid to you on the Release Deadline Date and the remaining payments shall be made as provided in this offer letter.

(iii) Further, if and to the extent necessary to avoid subjecting you to an additional tax under Section 409A, payment of all or a portion of the payments that constitute deferred compensation under Section 409A (the "**Deferred Payments**"), if any, that otherwise would be payable to you within the first 6 months following your termination of employment will instead be delayed until the date that is 6 months and 1 day following your termination of employment (except where your termination of employment is due to your death). All subsequent Deferred Payments, if any, will be payable in accordance with the payment schedule applicable to each payment or benefit. Each payment and benefit payable under this letter is intended to constitute a separate payment for purposes of the Section 409A-related regulations.

(iv) You and the Company agree to work together to consider amendments to this letter and to take such reasonable actions to avoid imposition of any additional tax or income recognition under Section 409A prior to actual payment to you. In no event will the Company reimburse you for any taxes that may be imposed on you as a result of Section 409A.

Exhibit B

Letter of Potential Conflicts

To Whom It May Concern:

I currently serve on the Board of Directors (non-executive director) of:

1. Renaptys Vaccines: A Colorado based, synthetic peptide vaccine company. Initial research focuses on a universal influenza vaccine.

   Renaptys is focused on a synthetic peptide vaccines that generate antibodies against conserved targets on viruses. Lead program at candidate for Universal Influenza vaccine. As co-founder my only compensation is the equity I hold in the company (i.e. no cash compensation).

2. ProteoTech: A Washington based company focused on small molecule approaches to protein misfolding diseases (CNS).

   ProteoTech's small molecule programs are designed to block aggregation as well as disaggragate misfolded proteins. This includes amyloid, alpha synuclein and Tau. There lead program is going into IND toxicology studies now with plan for phase 1/2a studies to begin by end of year. Compensation is $2500 and 10,000 options per meeting.

My commitment to both companies includes quarterly board calls/meetings and occasional interim calls to address issues. Neither of these roles represents a conflict of interest or time to Wave.

I will update my status at least once per year by devliering a letter to the Company's Board, detailing any other potentially conflicting engagements that I may have. And if circumstances change at any time, I will notify and disclose to the Board any such changes or any new potential conflicts.

Exhibit 10.13

Execution Version

EMPLOYMENT AGREEMENT

This Employment Agreement (the "Agreement"), made and entered into this 10th day of March, 2015 (the "Effective Date"), by and between Wave Life Sciences Pte. Ltd., a company organized under the laws of Singapore ("Company"), and Roberto Guerciolini ("Executive").

WHEREAS, Company wishes to employ Executive as its Senior Vice-President, Head of Early Development;

WHEREAS, Executive represents that Executive possesses the necessary skills to perform the duties of this position and that Executive has no obligation to any other person or entity which would prevent, limit or interfere with Executive's ability to do so;

WHEREAS, Executive and Company desire to enter into a formal Employment Agreement to assure the harmonious performance of the affairs of Company.

NOW, THEREFORE, in consideration of the mutual promises, terms, provisions, and conditions contained herein, the parties agree as follows:

1. Position and Devotion to Duties. Subject to the terms and conditions of this Agreement, Company shall employ Executive as its Senior Vice-President, Head of Early Development, reporting to Company's Chief Executive Officer. Executive accepts such employment upon the terms and conditions set forth herein, and agrees to perform to the best of Executive's ability the duties normally associated with such position and as determined by Company's Chief Executive Officer in his sole discretion. During Executive's employment, Executive shall devote all of Executive's business time and energies to the business and affairs of Company, provided that, nothing contained in this Section 1 shall prevent or limit Executive's right to manage Executive's personal investments on Executive's own personal time, including, without limitation the right to make passive investments in the securities of any publicly held entity so long as Executive's aggregate direct and indirect interest does not exceed two percent (2%) of the issued and outstanding securities of any class of securities of such publicly held entity. In addition, subject to the approval of Company's Board of Directors (the "Board"), Executive may (a) serve on the boards of directors of and/or provide related advisory or consulting services to other business entities that do not compete with the business of Company, including the entities listed on Exhibit A attached hereto, so long as such activities have been disclosed in writing to and approved by the Board, and (b) serve on the boards of directors of civic or not-for-profit corporations provided that the Executive provides the Board with written notice that the Executive has taken such position; provided that, if the Board determines that Executive's activities as aforesaid interfere with or may interfere with the effective discharge of Executive's duties and responsibilities to Company or that any business related to such service is then in competition with any business of Company, then the Board shall have the right to require Executive to immediately cease such activities.

2. Term and Termination of Employment.

(a) Term. Subject to the terms hereof, Executive's employment hereunder shall commence on March 10, 2015 (the "Commencement Date") and shall continue until terminated hereunder by either party as provided for below.

(b) Termination by Company. Notwithstanding anything else contained in this Agreement, Company may terminate Executive's employment hereunder as follows:

(i) For Cause (as defined below), by written notice by Company to Executive that Executive's employment is being terminated for Cause, which termination shall be effective on the date of such notice or such later date as specified in writing by Company; provided that, if Executive has cured the circumstances giving rise to Cause (as applicable pursuant to the terms and conditions set forth in Section 2(d)(i) below) then such termination shall not be effective; or

(ii) Without Cause, by written notice by Company to Executive that Executive's employment is being terminated, which termination shall be effective thirty (30) days after the date of such notice; provided that, Company may, at its sole discretion, either place Executive on unpaid leave or suspend all of his duties and powers for all or part of the applicable notice period.

(c) Termination by Executive. Notwithstanding anything else contained in this Agreement, Executive may terminate Executive's employment hereunder as follows:

(i) For Good Reason (as defined below), by written notice by Executive to Company that Executive is terminating Executive's employment for Good Reason, which termination shall be effective thirty (30) days after the date of such notice; provided that, if Company has cured the circumstances giving rise to Good Reason then such termination shall not be effective; or

(ii) Without Good Reason, by written notice by Executive to Company that Executive is terminating Executive's employment, which termination shall be effective thirty (30) days after the date of such notice; provided that, Company may, at its sole discretion, either place Executive on unpaid leave or suspend all of his duties and powers for all or part of the applicable notice period.

(d) Definitions.

(i) For the purposes of this Agreement, "Cause" shall mean Executive's: (A) having committed, intentionally or through gross negligence, wrongful damage to property of Company or its parents, subsidiaries or other affiliates; (B) commission of, or plea of guilty or *nolo contendere* to, a felony (excluding minor traffic violations); (C) engaging in fraud, misappropriation, dishonesty or embezzlement in connection with the business, operations or affairs of Company (including without limitation any business done with clients or vendors); (D) material breach of this Agreement or any other agreement between Executive and Company (including, without limitation, any breaches of Section 5 and/or Section 6 of this Agreement which shall be deemed "material" for purposes of this subsection (D)); (E) willful misconduct or gross negligence that is injurious to the business or reputation of Company; or (F) failure or refusal to perform, or

gross incompetence in the performance of, the duties and obligations delegated to Executive commensurate with Executive's position as an employee of Company, provided that, "Cause" shall not be deemed to have occurred pursuant to subsection (F) hereof unless Executive has first received written notice specifying in reasonable detail the particulars of such grounds and that Company intends to terminate Executive's employment hereunder for such ground, and if such ground is reasonably capable of being cured within ten (10) days, Executive has failed to cure such ground within a period of ten (10) days from the date of such notice (the "Cause Cure Period").

(ii) For the purposes of this Agreement, "Good Reason" shall mean, without Executive's consent: (A) a material reduction in Executive's Base Salary (other than as a result of a broad-based reduction of salary similarly affecting other Company executives having comparable rank, authority and seniority); (B) a material adverse change by Company in Executive's authority or responsibilities which causes Executive's position with Company to become of less authority or responsibility than his position immediately prior to such change; or (C) a change in the principal location at which Executive performs his duties for Company to a new location that is at least fifty (50) miles from the prior location; provided that, "Good Reason" shall not be deemed to have occurred unless: (x) Executive provides Company with written notice that she intends to terminate Executive's employment hereunder for one of the grounds set forth above within thirty (30) days of such ground occurring; (y) if such ground is capable of being cured, Company has failed to cure such ground within a period of thirty (30) days from the date of such written notice; and (z) Executive terminates Executive's employment within seventy-five (75) days from the date that Good Reason first occurs. For purposes of clarification, the above-listed conditions shall apply separately to each occurrence of Good Reason and failure to adhere to such conditions in the event of Good Reason shall not disqualify Executive from asserting Good Reason for any subsequent occurrence of Good Reason.

3. Compensation.

(a) Base Salary. As compensation for services rendered hereunder, Executive shall receive a salary of $315,000.00 annually (the "Base Salary"), which shall be paid in accordance with Company's then prevailing payroll practices. The annualized amount of the Base Salary is set forth herein as a matter of convenience and shall not be deemed or interpreted as an agreement by Company to employ Executive for any specific period of time.

(b) Annual Bonus. Beginning in calendar year 2015 and for each full calendar year thereafter that Executive is employed by Company hereunder, Executive will be eligible to receive an annual, discretionary bonus of up to twenty-five percent (25%) of the Base Salary (the "Bonus"), based upon achievement of individual and corporate performance objectives as determined by the Board. Such performance objectives shall be established by the Board by no later than March 1st of each calendar year that Executive is employed hereunder; provided that, for calendar year 2015, the performance objectives shall be established by no later than April 30th, 2015. The amount of the Bonus, if any, will be determined by the Board in its sole and absolute discretion. Whether Executive receives a Bonus and the amount of any such Bonus will be based on whether Executive and/or Company fail to achieve or achieves the aforementioned

performance objectives, as determined by the Board in its discretion. For calendar year 2015, the Bonus shall be pro-rated based on the number of calendar days that Executive is employed by Company hereunder from the Commencement Date through December 31, 2015. The Bonus will be deemed earned provided that Executive is employed as of December 31st of the calendar year to which such Bonus relates and is not in breach of this Agreement as of the payment date. The Bonus, if any, will be paid no later than March 15th of the year following the year to which the performance objectives relate.

(c) Equity. Subject to Board approval and pursuant to the terms of Company's 2014 Equity Incentive Plan, as amended (the "Plan"), Company shall grant Executive options to purchase 30,000 ordinary shares in the capital of Company (the "Stock Option"), at a per share exercise price equal to the fair market value of Company's ordinary share, as determined by the board of directors of Company on the date of grant. Vesting of the Stock Option will take place over forty-eight (48) months, with twenty-five percent (25%) of all shares vesting on the one (1) year anniversary of the Commencement Date, and the remaining shares vesting in equal monthly installments of 2.0833% of the total number of shares on the last day of each calendar month thereafter for thirty-six (36) months, subject to Executive's continued service to Company; provided that, upon the occurrence of a "Change of Control" (as defined in Company's standard form of stock option agreement), the vesting schedule of the Stock Option shall be accelerated in full. The Stock Option shall be evidenced in writing by, and subject to the terms and conditions of, the Plan and Company's standard form of stock option agreement.

(d) Fringe Benefits. Executive shall be entitled to participate in all benefit/welfare plans and fringe benefits provided to employees at the same level as Executive. Executive understands that, except when prohibited by applicable law, Company's benefit plans and fringe benefits may be amended by Company from time to time in its sole discretion.

(e) Vacation. Executive may take up to twenty (20) days of vacation per year, to be scheduled to minimize disruption to Company's operations. Executive's vacation use, accrual and carryover shall be subject to the terms and conditions of Company's vacation policy in effect from time to time.

(f) Reimbursement of Expenses. Company shall reimburse Executive for all ordinary and reasonable out-of-pocket business expenses incurred by Executive in furtherance of Company's business in accordance with Company's policies with respect thereto as in effect from time to time. Executive must submit any request for reimbursement no later than ninety (90) days following the date that such business expense is incurred. All reimbursements provided under this Agreement shall be made or provided in accordance with the requirements of Section 409A of the Internal Revenue Code and the rules and regulations thereunder ("Section 409A") including, where applicable, the requirement that (i) any reimbursement is for expenses incurred during Executive's lifetime (or during a shorter period of time specified in this Agreement), (ii) the amount of expenses eligible for reimbursement during a calendar year may not affect the expenses eligible for reimbursement in any other calendar year, (iii) the reimbursement of an eligible expense shall be made no later than the last day of the calendar year following the year in which the expense is incurred, and (iv) the right to reimbursement or in kind benefits is not subject to liquidation or exchange for another benefit.

(g) Withholding. All amounts payable to Executive under this Section 3 shall be subject to all required federal, state and local withholding, payroll and insurance taxes.

4. Termination and Severance Payments.

(a) Payment of Accrued Obligations. Regardless of the reason for any employment termination hereunder, Company shall pay to Executive: (i) the portion of Executive's Base Salary that has accrued prior to any termination of Executive's employment and has not yet been paid; (ii) the portion of Executive's vacation days that have accrued prior to any termination of Executive's employment and has not yet been used; and (iii) the amount of any expenses properly incurred by Executive on behalf of Company prior to any such termination and has not yet been reimbursed (together, the "Accrued Obligations") promptly following the effective date of termination. Executive's entitlement to other compensation or benefits under any Company plan or policy shall be governed by and determined in accordance with the terms of such plan or policy, except as otherwise specified in this Agreement.

(b) Severance. If Executive's employment hereunder is terminated by Company without Cause or by Executive for Good Reason, then, in addition to the Accrued Obligations:

(i) Company shall pay Executive an amount equal to Executive's monthly Base Salary for a six (6) month period, such payments to be made in accordance with Company's normal payroll practices, less all customary and required taxes and employment-related deductions; and

(ii) In the event that Executive is eligible for coverage under a Company health insurance plan and Executive has elected to have coverage thereunder and was covered thereunder prior to termination, and in the event that Executive chooses to exercise Executive's right under the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended (known as "COBRA"), to continue Executive's participation in such plan, Company shall pay its normal share of the costs for such coverage for a period of six (6) months from termination, to the same extent that such insurance is provided to persons then currently employed by Company. Company shall deduct from each of the first six (6) monthly installments due under Section 4(b)(i) the portion of the monthly premium due from Executive in accordance with the terms of such coverage. Notwithstanding any other provision of this Agreement, this obligation shall cease on the date Executive becomes eligible to receive health insurance benefits through any other employer, and Executive agrees to provide Company with written notice immediately upon becoming eligible for such benefits. Executive's acceptance of any payment on Executive's behalf or coverage provided hereunder shall be an express representation to Company that Executive has no such eligibility.

Subsections (i) and (ii) are referred to as the "Severance." The Severance is expressly subject to the conditions described in Section 4(c) below and Executive's compliance with the terms of Sections 5 and 6 hereof, and any payment or benefit made as part of such Severance shall be paid less all customary and required taxes and employment-related deductions.

(c) Severance Conditions. Company shall not be obligated to pay Executive the Severance unless Executive has executed without revocation a separation agreement in a form acceptable to Company, which must be signed by Executive, returned to Company and be enforceable and irrevocable no later than sixty (60) days following Executive's separation from service (the "Review Period"), and which shall include, at a minimum, a complete general release of claims against Company and its affiliated entities and each of their officers, directors, employees. If Executive executes and does not revoke such agreement within the Review Period, then payment of the Severance shall commence on the first (1st) day following the Review Period, provided that if the last day of the Review Period occurs in the calendar year following the year of termination, then the payment shall not commence until January 2 of such subsequent calendar year. The first payment shall include in a lump sum all amounts that were otherwise payable to Executive from the date Executive's separation from service occurred through such first payment.

(d) COBRA. If the payment of any COBRA or health insurance premiums by Company on behalf of Executive as described herein would otherwise violate any applicable nondiscrimination rules or cause the reimbursement of claims to be taxable under the Patient Protection and Affordable Care Act of 2010, together with the Health Care and Education Reconciliation Act of 2010 (collectively, the "Act") or Section 105(h) of the Internal Revenue Code, the COBRA premiums paid by Company shall be treated as taxable payments (subject to customary and required taxes and employment-related deductions) and be subject to imputed income tax treatment to the extent necessary to eliminate any discriminatory treatment or taxation under the Act or Section 105(h) of the Internal Revenue Code. If Company determines in its sole discretion that it cannot provide the COBRA benefits described herein under Company's health insurance plan without potentially violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act), Company shall in lieu thereof provide to Executive a taxable lump-sum payment in an amount equal to the sum of the monthly (or then remaining) COBRA premiums that Executive would be required to pay to maintain Executive's group health insurance coverage in effect on the separation date for the remaining portion of the period for which Executive shall receive the payments described in Sections 4(b).

(f) No Other Payments or Benefits Owing. The payments and benefits set forth in this Section 4 shall be the sole amounts owing to Executive upon termination of Executive's employment for the reasons set forth above and Executive shall not be eligible for any other payments or other forms of compensation or benefits. The payments and benefits set forth in this Section 4 shall be the sole remedy, if any, available to Executive in the event that Executive brings any claim against Company relating to the termination of Executive's employment under this Agreement.

5. Confidential Information and Non-Competition.

(a) Confidential Information. As used in this Agreement, "Confidential Information" means information belonging to Company, its parents, subsidiaries or affiliates (each, an "Interested Party"), which is of value to the Interested Party in the course of conducting its business, the disclosure of which could result in a competitive or other disadvantage to the Interested Party. Confidential Information includes, without limitation, financial information, reports, and forecasts; inventions, improvements and other intellectual property; trade secrets; know-how; drawings, specifications, algorithms, designs, processes or formulae; software;

firmware; market or sales information or plans; supplier lists (including their contact information, costs and pricing); customer lists (including past, current and potential customers, their contact information, preferences and purchase history); costs and pricing information and strategies; and business plans, prospects and opportunities (such as possible acquisitions or dispositions of businesses or facilities) which have been discussed or considered by an Interested Party. Confidential Information includes information developed by Executive in the course of Executive's employment with Company, as well as other information to which Executive may have access in connection with his employment. Confidential Information also includes the confidential information of others disclosed to Executive and with which an Interested Party has a business relationship. Notwithstanding the foregoing, Confidential Information does not include information in the public domain, unless due to breach of Executive's duties under Section 5(b).

(b) Confidentiality. At all times, both during Executive's employment with Company and after his termination, Executive will keep in confidence and trust all such Confidential Information, and will not use or disclose for his own benefit or the benefit of any other Person any such Confidential Information without the written consent of Company, except as may be necessary in the ordinary course of performing Executive's duties to Company.

(c) Documents, Records, etc. All documents, records, data, apparatus, equipment and other physical property, whether or not pertaining to Confidential Information, which are furnished to Executive by an Interested Party or are produced by Executive in connection with Executive's employment with Company will be and remain the sole property of the respective Interested Party. Executive will return to the Interested Party all such materials and property as and when requested by the Interested Party. In any event, Executive shall return all such materials and property immediately upon termination of Executive's employment for any reason. Executive will not retain any such material or property or any copies thereof after the termination of his employment.

(d) Non-Competition. From the Commencement Date through the twelve (12) month anniversary of the date that Executive's affiliation with Company is terminated, regardless of the reason for the termination (the "Restricted Period"), Executive will not, directly or indirectly, whether as owner, partner, shareholder, consultant, agent, employee, co-venturer or otherwise, engage, prepare to engage, participate, assist or invest in any Competing Business in any geographic area in which Company, or an Interested Party incorporating the know-how of Company's business, distributes, provides, markets or sells its products or services. Notwithstanding the foregoing, Executive may own up to two percent (2%) of the outstanding stock of a publicly held corporation which constitutes or is affiliated with a Competing Business.

(e) Non-Solicitation. During the Restricted Period, Executive shall not, directly or indirectly, take any of the following actions, and, to the extent Executive owns, manages, operates, controls, is employed by or participates in the ownership, management, operation or control of, or is connected in any manner with, any business, Executive shall use his best efforts to ensure that such business does not take any of the following actions:

(i) persuade or attempt to persuade any Customer, Prospective Customer or Supplier to cease doing business with an Interested Party, or to reduce the amount of business it does with an Interested Party;

(ii) solicit or service for himself or for any Person the business of a Customer, Prospective Customer or Supplier in order to provide goods or services that are competitive with the goods and services provided by an Interested Party;

(iii) persuade or attempt to persuade any Service Provider to cease providing services to an Interested Party; or

(iv) solicit for hire or hire for himself or for any third party any Service Provider.

(f) Definitions. The following definitions are applicable to this Section 5.

(i) "Competing Business" means any Person that (A) performs any of the services provided by Company, or manufactures, produces, develops or sells any of the products manufactured, produced, developed or sold by Company, (B) performs any services, or manufactures, produces, develops or sells any products, that are the same as or similar to the services or products planned, under consideration or under development by Company, or (C) engages in research and development efforts that are the same as or similar to the research and development efforts engaged in by Company.

(ii) "Customer" means any Person that purchased goods or services from an Interested Party at any time within two (2) years prior to the date of the solicitation prohibited by Section 5(e)(i) or (ii).

(iii) "Person" means an individual, a sole proprietorship, a corporation, a limited liability company, a partnership, an association, a trust, or other business entity, whether or not incorporated.

(iv) "Prospective Customer" means any Person with whom an Interested Party met or to whom an Interested Party presented for the purpose of soliciting the Person to become a Customer of an Interested Party within twelve (12) months prior to the date of the solicitation prohibited by Section 5(e)(i) or (ii).

(v) "Service Provider" means any Person who is an employee or independent contractor of an Interested Party or who was within twelve (12) months preceding the solicitation prohibited by Section 5(e)(iii) or (iv) an employee or independent contractor of an Interested Party.

(vi) "Supplier" means any Person that sold goods or services to an Interested Party at any time within two (2) years prior to the date of the solicitation prohibited by Section 5(e)(i) or (ii).

(g) Reasonableness of Restrictions. Executive recognizes and acknowledges that: (i) the types of activities which are prohibited by Section 5(d) and (e) are narrow and reasonable in relation to the skills which represent Executive's principal salable asset both to Company and to

other prospective employers; and (ii) the specific but broad temporal and geographical scope of Section 5(d) and (e) is reasonable, legitimate, and fair to Executive in light of Company's need to market its services and sell its services in a large geographic area in order to maintain a sufficient customer base and the limited restrictions on the type of employment prohibited herein compared to the types of employment for which Executive is qualified to earn his livelihood.

(h) Effect of Breach. In the event that Executive breaches any of the terms described in Section 5(d) and (e) above, Executive acknowledges and agrees that the Restricted Period shall be tolled and shall not run during the time that Executive is in breach of such obligations; provided that, the Restricted Period shall begin to run again once Executive has ceased breaching the terms of Section 5(d) and/or (e) (as applicable) and is otherwise in compliance with Executive's obligations described therein.

6. Intellectual Property.

(a) All creations, inventions, ideas, designs, copyrightable materials, trademarks, and other technology and rights (and any related improvements or modifications), whether or not subject to patent or copyright protection (collectively, "Creations"), relating to any activities of Company which are conceived by Executive or developed by Executive in the course of his employment with Company, whether conceived alone or with others and whether or not conceived or developed during regular business hours, and if based on Confidential Information, after the termination of Executive's employment, shall be the sole property of Company and, to the maximum extent permitted by applicable law, shall be deemed "works made for hire" as that term is used in the United States Copyright Act.

(b) To the extent, if any, that Executive retains any right, title or interest with respect to any Creations delivered to Company or related to his employment with Company, Executive hereby grants to Company an irrevocable, paid-up, transferable, sub-licensable, worldwide right and license: (i) to modify all or any portion of such Creations, including, without limitation, the making of additions to or deletions from such Creations, regardless of the medium (now or hereafter known) into which such Creations may be modified and regardless of the effect of such modifications on the integrity of such Creations; and (ii) to identify Executive, or not to identify him, as one or more authors of or contributors to such Creations or any portion thereof, whether or not such Creations or any portion thereof have been modified. Executive further waives any "moral" rights, or other rights with respect to attribution of authorship or integrity of such Creations that he may have under any applicable law, whether under copyright, trademark, unfair competition, defamation, right of privacy, contract, tort or other legal theory.

(c) Executive will promptly inform Company of any Creations conceived or developed by Executive during his employment hereunder. Executive will also allow Company to inspect any Creations he conceives or develops within one year after the termination of his employment for any reason to determine if they are based on Confidential Information. Executive shall (whether during his employment or after the termination of his employment) execute such written instruments and do other such acts as may be necessary in the opinion of Company or its counsel to secure Company's rights in the Creations, including obtaining a patent, registering a copyright, or otherwise (and Executive hereby irrevocably appoints Company and any of its officers as his attorney in fact to undertake such acts in his name).

Executive's obligation to execute written instruments and otherwise assist Company in securing its rights in the Creations will continue after the termination of his employment for any reason. Company shall reimburse Executive for any out-of-pocket expenses (but not attorneys' fees) he incurs in connection with his compliance with this Section 6(c).

7. Specific Acknowledgements Regarding Sections 5 and 6.

(a) Survival. Executive's acknowledgments and agreements set forth in Sections 5 and 6 shall survive the termination of Executive's employment with Company for any reason.

(b) Severability. The parties intend Sections 5 and 6 of this Agreement to be enforced as written. However, if any portion or provision of such sections shall to any extent be declared illegal or unenforceable by a duly authorized court having jurisdiction, then the remainder of such sections, or the application of such portion or provision in circumstances other than those as to which it is so declared illegal or unenforceable, shall not be affected thereby, and each remaining portion and provision of such sections shall be valid and enforceable to the fullest extent permitted by law.

(c) Modification And Blue Pencil. The parties agree and intend that the covenants contained in Sections 5 and 6 of this Agreement shall be deemed to be a series of separate covenants and agreements, and if any provision of such sections shall be adjudicated to be invalid or unenforceable, such provision, without any action on the part of the parties hereto, shall be deemed amended to delete (*i.e.*, "blue pencil") or modify the portion adjudicated to be invalid or unenforceable, to the extent necessary to cause the provision as amended to be valid and enforceable.

(d) Irreparable Harm. Executive expressly acknowledges that any breach or threatened breach of any of the terms and/or conditions of Sections 5 or 6 of this Agreement will result in substantial, continuing and irreparable injury to Company. Therefore, Executive hereby agrees that, in addition to any other remedy that may be available to Company, Company shall be entitled to injunctive or other equitable relief by a court of appropriate jurisdiction in the event of any breach or threatened breach of the terms of Section 5 or 6, without having to post bond.

(e) Covenants Enforceable Upon Material Job Change. Executive acknowledges and agrees that if he should transfer between or among any affiliates or subsidiaries of Company, wherever situated, or be promoted, demoted, reassigned to functions other than his present functions, or have his job duties changed, altered or modified in any way, all terms of Section 5 and Section 6 of this Agreement shall continue to apply with full force and effect.

(f) Impact of Breach on Severance. Executive hereby expressly acknowledges and agrees that if he breaches any of the terms and/or conditions set forth in Section 5 and/or Section 6 of this Agreement following a termination of his employment either by Company without Cause or by Executive for Good Reason, then, in addition to the injunctive relief described in Section 7(d) above, (i) Company shall cease providing Executive with any further Severance as of the date of such breach, (ii) Company shall not be obligated to provide Executive with, and Executive shall not be eligible or otherwise entitled to receive, any further Severance, (iii) Company's obligation to provide Executive with the Severance shall be null and void, and of no

further force or effect, and (iv) Company shall be entitled to recover, and Executive shall be obligated to repay to Company, any Severance previously provided to Executive by Company prior to the date of Executive's breach of Section 5 and/or Section 6 of this Agreement (as applicable).

(g) Disclosure to Future Employers. Executive shall provide, and Company, in its discretion, may similarly provide, a copy of the covenants contained in Section 5 and Section 6 of this Agreement to any competitive business or enterprise which Executive may, directly or indirectly, own, manage, operate, finance, join, control or in which Executive may participate in the ownership, management, operation, financing, or control, or with which Executive may be connected as an officer, director, employee, partner, principal, agent, representative, consultant or otherwise during the Restricted Period.

8. Code Sections 409A.

(a) In the event that the payments or benefits set forth in Section 4 constitute "non-qualified deferred compensation" subject to Section 409A, then the following conditions apply to such payments or benefits:

(i) Any termination of Executive's employment triggering payment of benefits under Section 4 must constitute a "separation from service" under Section 409A(a)(2)(A)(i) of the Code and Treas. Reg. §1.409A-1(h) before distribution of such benefits can commence. To the extent that the termination of Executive's employment does not constitute a separation of service under Section 409A(a)(2)(A)(i) of the Code and Treas. Reg. §1.409A-1(h) (as the result of further services that are reasonably anticipated to be provided by Executive to Company at the time Executive's employment terminates), any such payments under Section 4 that constitute deferred compensation under Section 409A shall be delayed until after the date of a subsequent event constituting a separation of service under Section 409A(a)(2)(A)(i) of the Code and Treas. Reg. §1.409A-1(h). For purposes of clarification, this Section 8(a) shall not cause any forfeiture of benefits on Executive's part, but shall only act as a delay until such time as a "separation from service" occurs.

(ii) Notwithstanding any other provision with respect to the timing of payments under Section 4 if, at the time of Executive's termination, Executive is deemed to be a "specified employee" of Company (within the meaning of Section 409A(a)(2)(B)(i) of the Code), then limited only to the extent necessary to comply with the requirements of Section 409A, any payments to which Executive may become entitled under Section 4 which are subject to Section 409A (and not otherwise exempt from its application) shall be withheld until the first (1st) business day of the seventh (7th) month following the termination of Executive's employment, at which time Executive shall be paid an aggregate amount equal to the accumulated, but unpaid, payments otherwise due to Executive under the terms of Section 4.

(b) It is intended that each installment of the payments and benefits provided under Section 4 shall be treated as a separate "payment" for purposes of Section 409A. Neither Company nor Executive shall have the right to accelerate or defer the delivery of any such payments or benefits except to the extent specifically permitted or required by Section 409A.

(c) Notwithstanding any other provision of this Agreement to the contrary, this Agreement shall be interpreted and at all times administered in a manner that avoids the inclusion of compensation in income under Section 409A, or the payment of increased taxes, excise taxes or other penalties under Section 409A. The parties intend this Agreement to be in compliance with Section 409A. Executive acknowledges and agrees that Company does not guarantee the tax treatment or tax consequences associated with any payment or benefit arising under this Agreement, including but not limited to consequences related to Section 409A.

9. General.

(a) Notices. Except as otherwise specifically provided herein, any notice required or permitted by this Agreement shall be in writing and shall be delivered as follows with notice deemed given as indicated: (i) by personal delivery when delivered personally; (ii) by overnight courier upon written verification of receipt; (iii) by facsimile transmission upon acknowledgment of receipt of electronic transmission; or (iv) by certified or registered mail, return receipt requested, upon verification of receipt.

Notices to Executive shall be sent to:

Roberto Guerciolini
[Address]

Notices to Company shall be sent to:

Attention: Chief Executive Officer
Wave Life Sciences Pte. Ltd.
419 Western Avenue,
Boston, Massachusetts 02135

with a copy to:

Mintz, Levin, Cohn, Ferris, Glovsky & Popeo, P.C.
One Financial Center
Boston, Massachusetts 02111
Attn: James M. Nicholas, Esq.

(b) Modifications and Amendments. The terms and provisions of this Agreement may be modified or amended only by written agreement executed by the parties hereto.

(c) Waivers and Consents. The terms and provisions of this Agreement may be waived, or consent for the departure therefrom granted, only by written document executed by the party entitled to the benefits of such terms or provisions. No such waiver or consent shall be deemed to be or shall constitute a waiver or consent with respect to any other terms or provisions of this Agreement, whether or not similar. Each such waiver or consent shall be effective only in the specific instance and for the purpose for which it was given, and shall not constitute a continuing waiver or consent.

(d) Assignment. Company may assign its rights and obligations hereunder to any person or entity that succeeds to all or substantially all of Company's business or that aspect of Company's business in which Executive is principally involved. Executive may not assign Executive's rights and obligations under this Agreement without the prior written consent of Company.

(e) Governing Law; Jury Waiver. This Agreement and the rights and obligations of the parties hereunder shall be construed in accordance with and governed by the law of Massachusetts without giving effect to the conflict of law principles thereof. Any legal action or proceeding with respect to this Agreement shall be brought in the courts of the Commonwealth of Massachusetts or the United States of America for the District of Massachusetts. By execution and delivery of this Agreement, each of the parties hereto accepts for itself and in respect of its property, generally and unconditionally, the exclusive jurisdiction of the aforesaid courts. ANY ACTION, DEMAND, CLAIM OR COUNTERCLAIM ARISING UNDER OR RELATING TO THIS AGREEMENT SHALL BE RESOLVED BY A JUDGE ALONE AND EACH OF COMPANY AND EXECUTIVE WAIVES ANY RIGHT TO A JURY TRIAL THEREOF.

(f) Foreign Data Protection Act. Without limiting the Company's rights under applicable law, the Executive hereby consents to the Company and any group company Processing (for any purpose directly or indirectly connected with the Executive's employment or otherwise related to the business of the Company and/or any group company), both during and for a period of six months after termination of the Executive's employment, Personal Data and, where reasonably necessary, to the transfer, storage and Processing by the Company of such data outside Singapore, and any other country in which the Company or any group company has offices. The Company will handle any such transfer in accordance with good practice and Company policy, and to the extent permitted by law. The following definitions are applicable to this Section 9(f):

"Processing" means obtaining, recording or holding data and includes organising, adapting or altering data, using or consulting data, disclosing data by transmission or otherwise making the data available or destroying the data.

"Personal Data" means the data provided by the Executive to the Company during the course of his employment that relates to the Executive, where the Executive can be identified from that data.

(g) Headings and Captions. The headings and captions of the various subdivisions of this Agreement are for convenience of reference only and shall in no way modify or affect the meaning or construction of any of the terms or provisions hereof.

(h) Entire Agreement. This Agreement, together with the other agreements specifically referenced herein, embodies the entire agreement and understanding between the parties hereto with respect to the subject matter hereof and supersedes all prior oral or written

agreements and understandings relating to the subject matter hereof. No statement, representation, warranty, covenant or agreement of any kind not expressly set forth in this Agreement shall affect, or be used to interpret, change or restrict, the express terms and provisions of this Agreement.

(i) Survival. The provisions of this Agreement shall survive the termination of this Agreement and/or the termination of Executive's employment to the extent necessary to effectuate the terms contained in this Agreement, including without limitation, the terms of Sections 5, 6, 7, 8 and 9 hereof.

(j) Counterparts. This Agreement may be executed in two or more counterparts, and by different parties hereto on separate counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. For all purposes a signature by fax shall be treated as an original.

[*Signature Page Immediately Follows***]**

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first written above.

ROBERTO GUERCIOLINI

/s/ Roberto Guerciolini
Signature
Address:

WAVE LIFE SCIENCES PTE. LTD.

By: /s/ Paul B. Bolno
Name: Paul B. Bolno, M.D.
Title: Chief Executive Officer

EXHIBIT A

Outside Activities

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Exhibit 10.14

WaVe Life Sciences, Pte. Ltd.
419 Western Ave Boston, MA 02135
Tel: 617 206 4830 Fax 617 206 4831

July 2nd, 2014

Dear Dr. Vargeese:

It is a pleasure to offer you a position as SVP, Head of Drug Discovery with Wave Life Sciences, Pte. Ltd. You will be reporting to Dr. Paul Bolno, President and CEO of the company. We believe that you will be a valuable member to our company and will make an important contribution to the achievement of our goals. The details of your employment are outlined below.

Effective Date

Your first day of employment will be mutually agreed upon, and is expected to be no later than August 18th, 2014.

Compensation

The annually salary will be $285,000 (Two Hundred and Eighty Five Thousand Dollars) and will be paid in accordance with our normal payroll procedures. In addition, upon the establishment of the employee option pool and final approval of the board, you will be entitled to 1.5% of this newly issued option pool. Options will have a 4-year vesting period with vesting occurring on monthly intervals starting from date of hire.

Variable Pay/Bonus

Your position is eligible to participate in a discretionary variable, performance based pay bonus program up to 25% of your base salary subject to withholding and other applicable taxes, and paid in accordance with company's usual payroll procedures. As per our agreement, you will receive $15,000 (Fifteen Thousand dollars) upon your commencement date, provided, however, that you sign and return our Employee Guide and our Confidentiality and Invention Disclosure and Assignment Agreement, all of which is a condition to your employment with us.

Benefits

You will be eligible to participate in the Company's group benefits program beginning the first day of the month following your hire date unless your hire date is the first work day of the month. These coverage, waiting periods, and rates of coverage are subject to change, as determined by the Company, and are not to be considered a contractual agreement with the employee. The benefits are as follows:

- Medical, dental, vision, and pharmaceutical coverage's are provided at no charge to the employee and available to immediate family members at a fee.
- Short term and long term disability insurance is company paid for the employee.

Work Authorization

All new employees are required to complete the Immigration and Naturalization Form (1-9) within the first three (3) days of employment with the Company. These documents verify your identity and right to work in the United States.

If you are in need of a work visa please notify Dr. Paul Balno at the time of job acceptance.

At Will Employment

Your employment with WaVe Life Sciences, Pte. Ltd. is considered at-will employment. At-will employment means that the employer or employee may terminate the employment relationship, at any time with two week advance notice, with or without cause. ***This offer letter does not constitute an employment contract nor guarantee permanent employment. The Company reserves the right, at its' sole discretion, to modify your compensation, benefits, and other terms or conditions of employment, at any time.***

Confidentiality/Non-Disclosure

As a condition of employment, you are required to execute the company's Confidentiality Agreement which will be provided to you at New Hire Orientation.

Entire Agreement

This letter and the above referenced Confidentiality Agreement contain all of the terms of your employment with WaVe Life Sciences, Ptd. Ltd. and supersedes any prior understandings or agreement, whether oral or in writing. This letter and Confidentiality Agreement can only be modified in writing and with express agreement by the Company.

We appreciate your interest in WaVe Life Sciences, Ptd. Ltd., and look forward to rewarding working relationship. Please contact me with any questions.

Sincerely,

/s/ Paul Bolno

Dr. Paul Bolno
President and CEO

I have read and understand the information stated above and accept this offer of employment.

/s/ Chandra Vargeese	July 18th, 2014
Name Chandra Vargeese, Ph.D.	***Date***

Upon acceptance of this employment offer, fax a signed copy of this letter to Dr. Paul Bolno

Exhibit 10.15

WaVe Life Sciences, Pte. Ltd.
419 Western Ave Boston, MA 02135
Tel: 617 206 4830 Fax 617 206 4831

March 10th, 2014

Dear Dr. Christopher Francis:

It is a pleasure to offer you a position as VP Business Development with Wave Life Sciences. You will be reporting to Dr. Paul Bolno, President and CEO of the company. We believe that you will be a valuable addition to our new company and will make an important contribution to the achievement of our goals. The details of your employment are outlined below.

Effective Date

Your first day of employment will be mutually agreed upon, and is expected to be no later than April 31st, 2014.

Compensation

Your position is classified as exempt. The annual salary will be $185,000 (One Hundred and Eighty Five Thousand) and will be paid on a semi-monthly basis subject to withholding and other applicable taxes, and paid in accordance with the Company's usual payroll procedures. In addition, upon the establishment of the employee option pool and final approval of the board, you will be entitled to 1% of this newly issued option pool. Options will have a 4-year vesting period with vesting occurring on monthly intervals starting from date of hire.

Variable Pay/Bonus

Your position is eligible to participate in a discretionary, variable, performance-based pay bonus program up to 25% of base pay subject to withholding and other applicable taxes, and paid in accordance with the Company's usual payroll procedures. In addition and based on performance you may be entitled to additional stock options; subject to final board approval.

WaVe Life Sciences, Pte. Ltd.
419 Western Ave Boston, MA 02135
Tel: 617 206 4830 Fax 617 206 4831

Benefits

You will be eligible to participate in the Company's group benefits program beginning the first day of the month following your hire date, unless your hire date is the first work day of the month. The benefits program, including waiting periods and rates of coverage, is subject to change, as determined by the Company, and is not to be considered a contractual agreement with the employee. The benefits are as follows:

- Medical, dental, vision, and pharmaceutical coverage is provided at no charge to the employee and available to immediate family members at a discounted fee.
- Life insurance is paid at one time (1x) the employee's annual salary to a maximum of $50K; additional coverage is available at a fee.
- Short term and long term disability insurance is Company paid for the employee.

Work Authorization

All new employees are required to complete the Immigration and Naturalization Form (I-9) within the first three (3) days of employment with the Company. These documents verify your identity and right to work in the United States.

At Will Employment

Your employment with Wave is considered at-will employment. At-will employment means that the employer or employee may terminate the employment relationship, at any time with a two-week advance notice, with or without cause. ***This offer letter does not constitute an employment contract nor guarantee permanent employment. The Company reserves the right, at its sole discretion, to modify your compensation, benefits, and other terms or conditions of employment, at any time.***

Confidentiality/Non-Disclosure

As a condition of employment, you are required to execute the Company's Confidentiality Agreement that will be provided to you at New Hire Orientation.

Entire Agreement

This letter and the above referenced Confidentiality Agreement contain all of the terms of your employment with Wave Life Sciences, and supersede any prior understandings or agreements, whether oral or in writing. This letter and the Confidentiality Agreement can only be modified in writing and with express agreement by the Company.

WaVe Life Sciences, Pte. Ltd.
419 Western Ave Boston, MA 02135
Tel: 617 206 4830 Fax 617 206 4831

We appreciate your interest in Wave and look forward to a rewarding working relationship. Please contact me with any questions.

Sincerely,

/s/ Paul Bolno

Dr. Paul Bolno

President and CEO; Wave Life Sciences

I have read and understand the information stated above and accept this offer of employment.

/s/ Christopher Francis	March 20th, 2014
Name: Christopher Francis	***Date***

Upon acceptance of this employment offer, fax a signed copy of this letter to Dr. Paul Bolno.

Exhibit 10.16

ONTORII, INC.

CONSULTING AGREEMENT

This Consulting Agreement (this "***Agreement***") is made and entered into effective as of the 1st of April, 2012 (the "***Effective Date***") by and between Ontorii, Inc., a Delaware corporation with its principal place of business at 419 Western Avenue, Boston, Mass. 02135 (the "***Company***"), and Greg Verdine an individual with his principal place of business at [Address] ("***Consultant***") (each herein referred to individually as a "***Party***," or collectively as the "***Parties***").

The Company desires to retain Consultant as an independent contractor to perform consulting services for the Company, and Consultant is willing to perform such services, on the terms described below. In consideration of the mutual promises contained herein, the Parties agree as follows:

1. Services and Compensation

Consultant shall perform the services described in **Exhibit A** (the "***Services***") for the Company (or its designee), and the Company agrees to pay Consultant the compensation described in **Exhibit A** for Consultant's performance of the Services.

2. Applicability to Past Activities

Consultant agrees that if and to the extent that Consultant provided any services or made efforts on behalf of or for the benefit of Company, or related to the current or prospective business of Company in anticipation of Consultant's involvement with the Company, that would have been "Services" if performed during the term of this Agreement (the "***Prior Consulting Period***") and to the extent that during the Prior Consulting Period: (i) Consultant received access to any information from or on behalf of Company that would have been "Confidential Information" (as defined below) if Consultant received access to such information during the term of this Agreement; or (ii) Consultant conceived, created, authored, invented, developed or reduced to practice any item (including any intellectual property rights with respect thereto) on behalf of or for the benefit of Company, or related to the current or prospective business of Company in anticipation of Consultant's involvement with Company, that would have been an "Invention" (as defined below) if conceived, created, authored, invented, developed or reduced to practice during the term of this Agreement; then any such information shall be deemed "Confidential Information" hereunder and any such item shall be deemed an "Invention" hereunder, and this Agreement shall apply to such activities, information or item as if disclosed, conceived, created, authored, invented, developed or reduced to practice during the term of this Agreement. Consultant further acknowledges that Consultant has been fully compensated for all Services provided during any such Prior Consulting Period.

3. Confidentiality

A. ***Definition of Confidential Information.*** "***Confidential Information***" means any non-public information that relates to the actual or identified to Consultant as reasonably anticipated business and/or products, research or development of the Company, its affiliates or subsidiaries, or to the Company's, its affiliates' or subsidiaries' technical data, trade secrets, or know-how, including, but not limited to, research, product plans, or other information regarding the Company's, its affiliates' or subsidiaries' products or services and markets therefor, customer lists and customers (including, but not limited to, customers of the Company on whom Consultant called or with whom Consultant became acquainted during the term of this Agreement), software, developments, inventions, processes, formulas,

technology, designs, drawings, engineering, hardware configuration information, marketing, finances, and other business information disclosed to Consultant by the Company, its affiliates or subsidiaries, either directly or indirectly, in writing, orally or by drawings or inspection of premises, parts, equipment, or other property of Company, its affiliates or subsidiaries. Notwithstanding the foregoing, Confidential Information shall not include any such information which Consultant can establish (i) was publicly known or made generally available prior to the time of disclosure to Consultant; (ii) becomes publicly known or made generally available after disclosure to Consultant through no wrongful action or inaction of Consultant; (iii) is in the rightful possession of Consultant, without violation of Consultant's confidentiality obligations under this Agreement, at the time of disclosure as shown by Consultant's then-contemporaneous written records; (iv) becomes available to Consultant on a nonconfidential basis; or (v) was independently developed by Consultant without reference to the information provided to Consultant a by Company, its affiliates and subsidiaries. In addition, Confidential Information shall not include information directly or indirectly generated by Consultant unless the information (i) is generated as a direct result of the performance of Services by Consultant and (ii) is not directly or indirectly generated in the course of Consultant's activities for Harvard University or for Third Rock Ventures, LLC.

B. ***Nonuse and Nondisclosure.*** During and after the term of this Agreement, Consultant will hold in the strictest confidence, and take all reasonable precautions to prevent any unauthorized use or disclosure of Confidential Information by Consultant, and Consultant will not (i) use the Confidential Information for any purpose whatsoever other than as necessary for the performance of the Services on behalf of the Company, or (ii) disclose the Confidential Information to any third party without the prior writt*en consent of an* authorized representative of Company. Consultant may disclose Confidential Information to the extent compelled by applicable law; *provided however*, prior to such disclosure, Consultant shall provide prior written notice to Company and, at Company's sole expense, reasonably assist Company to seek a protective order or such similar confidential protection as may be available under applicable law. Consultant agrees that no ownership of Confidential Information is conveyed to the Consultant. Without limiting the foregoing, Consultant shall not use or disclose any Confidential Information to invent, author, make, develop, design, or otherwise enable others to invent, author, make, develop, or design identical or substantially similar designs as those developed under this Agreement for any third party. Consultant agrees that Consultant's obligations under this Section 3.B shall continue for three (3) years after the termination of this Agreement.

C. ***Other Client Confidential Information.*** Consultant agrees that Consultant will not improperly use, disclose, or induce the Company to use any proprietary information or trade secrets of any former or concurrent employer of Consultant or other person or entity with which Consultant has an obligation to keep in confidence. Consultant also agrees that Consultant will use good faith efforts to not bring onto the Company's premises or transfer onto the Company's technology systems any unpublished document, proprietary information, or trade secrets belonging to any third party unless disclosure to, and use by, the Company has been consented to in writing by such third party.

D. ***Third Party Confidential Information.*** Provided that third party Confidential Information is specifically identified to Consultant in writing as constituting third party Confidential Information prior to or contemporaneous with its disclosure to Consultant, Consultant recognizes that the Company has received and in the future will receive from third parties their confidential or proprietary information subject to a duty on the Company's part to maintain the confidentiality of such information and to use it only for certain limited purposes. Consultant agrees that at all times during the term of this Agreement and for three (3) years thereafter, Consultant owes the Company and such third parties a duty to hold all such third party Confidential Information in the strictest confidence and not to use it or disclose it to any person, firm, corporation, or other third party except as necessary in carrying out the Services for the Company consistent with the Company's agreement with such third party.

4. Ownership

A. ***Assignment of Inventions.*** Consultant agrees that all right, title, and interest in and to any copyrightable material, notes, records, drawings, designs, inventions, improvements, developments, discoveries and trade secrets conceived, discovered, authored, invented, developed or reduced to practice by Consultant, solely or in collaboration with others, during the term of this Agreement and arising out of, or in connection with, performing the Services under this Agreement and any copyrights, patents, trade secrets, mask work rights or other intellectual property rights relating to the foregoing (collectively, "***Inventions***"), are the sole property of the Company. However, the term Inventions excludes such materials, ideas and knowledge generated in the course of Consultant's activities for Harvard University and for Third Rock Ventures, LLC. Consultant also agrees to use good faith efforts to promptly make full written disclosure to the Company of any Inventions and to deliver and assign (or assist in assigning) and hereby irrevocably assigns fully to the Company all right, title and interest in and to the Inventions.

B. ***Pre-Existing Materials.*** Subject to Section 4.A, Consultant agrees that if, in the course of performing the Services, Consultant incorporates into any Invention or utilizes in the performance of the Services any pre-existing invention, discovery, original works of authorship, development, improvements, trade secret, concept, or other proprietary information or intellectual property right owned by Consultant or in which Consultant has an interest ("***Prior Inventions***"), (i) Consultant will provide the Company with prior written notice and (ii) the Company is hereby granted a nonexclusive, royalty-free, perpetual, irrevocable, transferable, worldwide license (with the right to grant and authorize sublicenses) to make, have made, use, import, offer for sale, sell, reproduce, distribute, modify, adapt, prepare derivative works of, display, perform, and otherwise exploit such Prior Inventions, without restriction, including, without limitation, as part of or in connection with Inventions, and to practice any method related thereto. Consultant will not incorporate any invention, improvement, development, concept, discovery, work of authorship or other proprietary information which is known to Consultant to be owned by any third party into any Invention without Company's prior written permission, including without limitation any free software or open source software.

C. ***Moral Rights.*** Any assignment to the Company of Inventions includes all rights of attribution, paternity, integrity, modification, disclosure and withdrawal, and any other rights throughout the world that may be known as or referred to as "moral rights," "artist's rights," "droit moral," or the like (collectively, "***Moral Rights***"). To the extent that Moral Rights cannot be assigned under applicable law, Consultant hereby waives and agrees not to enforce any and all Moral Rights, including, without limitation, any limitation on subsequent modification, to the extent permitted under applicable law.

D. ***Maintenance of Records.*** Consultant agrees to use good faith efforts to keep and maintain adequate, current, accurate, and authentic written records of all Inventions made by Consultant (solely or jointly with others) during the term of the Agreement, and for a period of three (3) years thereafter. The records will be in the form of notes, sketches, drawings, electronic files, reports, or any other format that is customary in the industry and/or otherwise reasonably specified by the Company. Such records are and remain the sole property of the Company at all times and upon Company's request, Consultant shall deliver (or cause to be delivered) the same.

E. ***Further Assurances.*** Consultant agrees to assist Company, or its designee, at the Company's expense, in every proper way to secure the Company's rights in Inventions in any and all countries, including the disclosure to the Company of all pertinent information and data with respect thereto, the execution of all applications, specifications, oaths, assignments and all other instruments that the Company may deem necessary in order to apply for, register, obtain, maintain, defend, and enforce

such rights, and in order to deliver, assign and convey to the Company, its successors, assigns and nominees the sole and exclusive right, title, and interest in and to all Inventions and testifying in a suit or other proceeding relating to such Inventions. Consultant further agrees that Consultant's obligations under this Section 4.E shall continue after the termination of this Agreement.

F. ***Attorney-in-Fact.*** Consultant agrees that, if the Company is unable because of Consultant's unavailability, dissolution, mental or physical incapacity, or for any other reason, to secure Consultant's signature with respect to any Inventions, including, without limitation, for the purpose of applying for or pursuing any applications for any United States or foreign patents or mask work or copyright registrations covering the Inventions assigned to the Company in Section 4.A, then Consultant hereby irrevocably designates and appoints the Company and its duly authorized officers and agents as Consultant's agent and attorney-in-fact, to act for and on Consultant's behalf to execute and file any papers and oaths and to do all other lawfully permitted acts with respect to such Inventions to further the prosecution and issuance of patents, copyright and mask work registrations with the same legal force and effect as if executed by Consultant. This power of attorney shall be deemed coupled with an interest, and shall be irrevocable.

5. Conflicting Obligations

A. Consultant represents and warrants that Consultant has no agreements, relationships, or commitments to any other person or entity that conflict with the provisions of this Agreement, Consultant's obligations to the Company under this Agreement, and/or Consultant's ability to perform the Services. Consultant will not enter into any such conflicting agreement during the term of this Agreement.

B. In light of the unique and specialized nature of Consultant's services, Consultant shall not have the right to subcontract the performance of any Services other than to an entity which at the relevant time Consultant substantially owns or controls including, without limitation, Verdyne Corporation, a Verdine family trust, or an LLC so long as Greg Verdine directly and personally renders all of the Services and Greg Verdine remains liable for all obligations of Consultant.

6. Return of Company Materials

Upon the termination of this Agreement, or upon Company's earlier request, Consultant will immediately deliver to the Company, and will not keep in Consultant's possession, recreate, or deliver to anyone else, any and all Company property, including, but not limited to, Confidential Information, tangible embodiments of the Inventions, all devices and equipment belonging to the Company, all electronically-stored information and passwords to access such property, those records maintained pursuant to Section 4.D and any reproductions of any of the foregoing items that Consultant may have in Consultant's possession or control.

7. Reports

Consultant agrees that Consultant will periodically keep the Company advised as to Consultant's progress in performing the Services under this Agreement. Consultant further agrees that Consultant will, as requested by the Company, prepare written reports with respect to such progress. The Company and Consultant agree that the reasonable time expended in preparing such written reports will be considered time devoted to the performance of the Services.

8. Term and Termination

A. ***Term.*** The term of this Agreement will begin on the Effective Date of this Agreement and will continue until the earlier of (i) final completion of the Services or (ii) termination as provided in Section 8.B.

B. ***Termination.*** The Company or Consultant may terminate this Agreement upon giving the other Party fourteen (14) days prior written notice of such termination pursuant to Section 14.G of this Agreement.

C. ***Survival.*** Upon any termination, all rights and duties of the Company and Consultant toward each other shall cease except:

(1) The Company will pay, within thirty (30) days after the effective date of termination, all amounts owing to Consultant for Services provided by Consultant through the termination date and related reimbursable expenses, if any, submitted in accordance with the Company's policies and in accordance with the provisions of Article 1 of this Agreement; and

(2) Article 3 (Confidentiality), Article 4 (Ownership), Section 5.B (Conflicting Obligations), Article 6 (Return of Company Materials), Article 8 (Term and Termination), Article 9 (Independent Contractor; Benefits), Article 10 (Indemnification), Article 11 (Nonsolicitation), Article 12 (Public Statements), Article 13 (Arbitration and Equitable Relief), and Article 14 (Miscellaneous) will survive termination or expiration of this Agreement in accordance with their terms.

9. Independent Contractor; Benefits

A. ***Independent Contractor.*** It is the express intention of the Company and Consultant that Consultant perform the Services as an independent contractor to the Company. Nothing in this Agreement shall in any way be construed to constitute Consultant as an agent, employee or representative of the Company. Without limiting the generality of the foregoing, Consultant is not authorized to bind the Company to any liability or obligation or to represent that Consultant has any such authority. Consultant agrees to furnish all tools and materials necessary to accomplish this Agreement and shall incur all expenses associated with performance, except as expressly provided in **Exhibit A.** Consultant acknowledges and agrees that Consultant is obligated to report as income all compensation received by Consultant pursuant to this Agreement. Consultant agrees to and acknowledges the obligation to pay all self-employment and other taxes on such income.

B. ***Benefits.*** The Company and Consultant agree that Consultant will receive no Company-sponsored benefits from the Company where benefits include, but are not limited to, paid vacation, sick leave, medical insurance and 401k participation. If Consultant is reclassified by a state or federal agency or court as the Company's employee, Consultant will become a reclassified employee and will receive no benefits from the Company, except those mandated by state or federal law, even if by the terms of the Company's benefit plans or programs of the Company in effect at the time of such reclassification, Consultant would otherwise be eligible for such benefits.

10. Indemnification

Consultant agrees to indemnify and hold harmless the Company and its affiliates and their directors, officers and employees from and against all taxes, losses, damages, liabilities, costs and expenses, including reasonable attorneys' fees and other legal expenses (but excluding attorneys' fees and other legal and accounting expenses regarding (ii) in this Article), arising directly or indirectly from or in

connection with (i) any negligent, reckless or intentionally wrongful act of Consultant or Consultant's assistants, employees, contractors or agents, (ii) a determination by a court or agency that the Consultant is not an independent contractor, (iii) any breach by the Consultant or Consultant's assistants, employees, contractors or agents of any of the covenants contained in this Agreement and corresponding Confidential Information and Invention Assignment Agreement, (iv) any failure of Consultant to perform the Services in accordance with all applicable laws, rules and regulations, or (v) any violation or claimed violation of a third party's rights resulting in whole or in part from the Company's use of the Inventions or other deliverables of Consultant under this Agreement.

11. Nonsolicitation

To the fullest extent permitted under applicable law, from the date of this Agreement until twelve (12) months after the termination of this Agreement for any reason (the "***Restricted Period***"), Consultant will not, without the Company's prior written consent, directly or indirectly, solicit any of the Company's employees to leave their employment, or attempt to solicit employees of the Company, either for Consultant or for any other person or entity. Consultant agrees that nothing in this Article 11 shall affect Consultant's continuing obligations under this Agreement during and after this twelve (12) month period, including, without limitation, Consultant's obligations under Article 3.

12. Public Statements

Company agrees that it will not make any public statement which specifically refers to Consultant unless the proposed statement has been provided to Consultant for his review and approval at least forty-eight (48) hours before publication and Company receives Consultant's approval.

13. Arbitration and Equitable Relief

A. ***Arbitration.*** IN CONSIDERATION OF CONSULTANT'S CONSULTING RELATIONSHIP WITH COMPANY, ITS PROMISE TO ARBITRATE ALL DISPUTES RELATED TO CONSULTANT'S CONSULTING RELATIONSHIP WITH THE COMPANY AND CONSULTANT'S RECEIPT OF THE COMPENSATION AND OTHER BENEFITS PAID TO CONSULTANT BY COMPANY, AT PRESENT AND IN THE FUTURE, CONSULTANT AGREES THAT ANY AND ALL CONTROVERSIES, CLAIMS, OR DISPUTES WITH ANYONE (INCLUDING COMPANY AND ANY EMPLOYEE, OFFICER, DIRECTOR, SHAREHOLDER OR BENEFIT PLAN OF THE COMPANY IN THEIR CAPACITY AS SUCH OR OTHERWISE), WHETHER BROUGHT ON AN INDIVIDUAL, GROUP, OR CLASS BASIS, ARISING OUT OF, RELATING TO, OR RESULTING FROM CONSULTANT'S CONSULTING RELATIONSHIP WITH THE COMPANY OR THE TERMINATION OF CONSULTANT'S CONSULTING RELATIONSHIP WITH THE COMPANY, INCLUDING ANY BREACH OF THIS AGREEMENT, SHALL BE SUBJECT TO BINDING ARBITRATION UNDER THE ARBITRATION RULES SET FORTH IN THE GENERAL LAWS OF MASSACHUSETTS, CHAPTER 251 (THE "***RULES***") AND PURSUANT TO MASSACHUSETTS LAW. THE FEDERAL ARBITRATION ACT SHALL CONTINUE TO APPLY WITH FULL FORCE AND EFFECT NOTWITHSTANDING THE APPLICATION OF PROCEDURAL RULES SET FORTH IN THE ACT. **DISPUTES WHICH CONSULTANT AGREES TO ARBITRATE, AND THEREBY AGREES TO WAIVE ANY RIGHT TO A TRIAL BY JURY, INCLUDE ANY STATUTORY CLAIMS UNDER LOCAL, STATE, OR FEDERAL LAW, INCLUDING, BUT NOT LIMITED TO, CLAIMS UNDER TITLE VII OF THE CIVIL RIGHTS ACT OF 1964, THE CIVIL RIGHTS ACT OF 1991, THE AMERICANS WITH DISABILITIES ACT OF 1990, THE AGE DISCRIMINATION IN EMPLOYMENT ACT OF 1967, THE OLDER WORKERS BENEFIT PROTECTION ACT, THE SARBANES-OXLEY ACT, THE WORKER ADJUSTMENT AND RETRAINING NOTIFICATION ACT, THE FAIR CREDIT REPORTING**

ACT, THE EMPLOYEE RETIREMENT INCOME SECURITY ACT OF 1974, THE FAMILY AND MEDICAL LEAVE ACT, THE MASSACHUSETTS FAIR EMPLOYMENT PRACTICES ACT, THE MASSACHUSETTS CIVIL RIGHTS ACT, THE MASSACHUSETTS EQUAL PAY ACT, THE MASSACHUSETTS EQUAL RIGHTS ACT, THE GENERAL LAWS OF MASSACHUSETTS, CLAIMS OF HARASSMENT, DISCRIMINATION OR WRONGFUL TERMINATION AND ANY STATUTORY CLAIMS. CONSULTANT FURTHER UNDERSTANDS THAT THIS AGREEMENT TO ARBITRATE ALSO APPLIES TO ANY DISPUTES THAT THE COMPANY MAY HAVE WITH CONSULTANT.

B. ***Procedure.*** CONSULTANT AGREES THAT ANY ARBITRATION WILL BE ADMINISTERED BY JUDICIAL ARBITRATION & MEDIATION SERVICES, INC. ("***JAMS***") PURSUANT TO ITS COMMERCIAL ARBITRATION RULES & PROCEDURES (THE "***JAMS RULES***"). CONSULTANT AGREES THAT THE ARBITRATOR SHALL HAVE THE POWER TO DECIDE ANY MOTIONS BROUGHT BY ANY PARTY TO THE ARBITRATION, INCLUDING MOTIONS FOR SUMMARY JUDGMENT AND/OR ADJUDICATION AND MOTIONS TO DISMISS AND DEMURRERS, PRIOR TO ANY ARBITRATION HEARING. CONSULTANT AGREES THAT THE ARBITRATOR SHALL ISSUE A WRITTEN DECISION ON THE MERITS. CONSULTANT ALSO AGREES THAT THE ARBITRATOR SHALL HAVE THE POWER TO AWARD ANY REMEDIES AVAILABLE UNDER APPLICABLE LAW, AND THAT THE ARBITRATOR SHALL AWARD ATTORNEYS' FEES AND COSTS TO THE PREVAILING PARTY, EXCEPT AS PROHIBITED BY LAW. CONSULTANT AGREES THAT THE DECREE OR AWARD RENDERED BY THE ARBITRATOR MAY BE ENTERED AS A FINAL AND BINDING JUDGMENT IN ANY COURT HAVING JURISDICTION THEREOF. CONSULTANT AGREES THAT THE ARBITRATOR SHALL ADMINISTER AND CONDUCT ANY ARBITRATION IN ACCORDANCE WITH MASSACHUSETTS LAW AND THAT THE ARBITRATOR SHALL APPLY SUBSTANTIVE AND PROCEDURAL MASSACHUSETTS LAW TO ANY DISPUTE OR CLAIM, WITHOUT REFERENCE TO RULES OF CONFLICT OF LAW. TO THE EXTENT THAT THE JAMS RULES CONFLICT WITH MASSACHUSETTS LAW, MASSACHUSETTS LAW SHALL TAKE PRECEDENCE. CONSULTANT AND COMPANY BOTH AGREE THAT ANY ARBITRATION UNDER THIS AGREEMENT SHALL BE CONDUCTED IN MASSACHUSETTS.

C. ***Remedy.*** EXCEPT AS PROVIDED BY THE ACT AND THIS AGREEMENT, ARBITRATION SHALL BE THE SOLE, EXCLUSIVE, AND FINAL REMEDY FOR ANY DISPUTE BETWEEN CONSULTANT AND THE COMPANY. ACCORDINGLY, EXCEPT AS PROVIDED FOR BY THE ACT AND THIS AGREEMENT, NEITHER CONSULTANT NOR THE COMPANY WILL BE PERMITTED TO PURSUE COURT ACTION REGARDING CLAIMS THAT ARE SUBJECT TO ARBITRATION.

D. ***Availability of Injunctive Relief.*** BOTH PARTIES AGREE THAT ANY PARTY MAY ALSO PETITION THE COURT FOR INJUNCTIVE RELIEF WHERE EITHER PARTY ALLEGES OR CLAIMS A VIOLATION OF ANY AGREEMENT REGARDING INTELLECTUAL PROPERTY, CONFIDENTIAL INFORMATION OR NONINTERFERENCE. IN THE EVENT EITHER PARTY SEEKS INJUNCTIVE RELIEF, THE PREVAILING PARTY SHALL BE ENTITLED TO RECOVER REASONABLE COSTS AND ATTORNEYS' FEES. THE "PREVAILING PARTY" MEANS THE PARTY DETERMINED TO HAVE MOST NEARLY PREVAILED, EVEN IF SUCH PARTY DID NOT PREVAIL IN ALL MATTERS, AND NOT NECESSARILY THE ONE IN WHOSE FAVOR AN AWARD, JUDGMENT OR FINAL ORDER IS RENDERED OR ISSUED.

E. ***Administrative Relief.*** CONSULTANT UNDERSTANDS THAT THIS AGREEMENT DOES NOT PROHIBIT CONSULTANT FROM PURSUING AN ADMINISTRATIVE CLAIM WITH A LOCAL, STATE OR FEDERAL ADMINISTRATIVE BODY OR GOVERNMENT

AGENCY SUCH AS THE DEPARTMENT OF FAIR EMPLOYMENT AND HOUSING, THE EQUAL EMPLOYMENT OPPORTUNITY COMMISSION, THE NATIONAL LABOR RELATIONS BOARD, OR THE WORKERS' COMPENSATION BOARD. THIS AGREEMENT DOES, HOWEVER, PRECLUDE CONSULTANT FROM PURSUING COURT ACTION REGARDING ANY SUCH CLAIM, EXCEPT AS PERMITTED BY LAW.

F. ***Voluntary Nature of Agreement.*** CONSULTANT ACKNOWLEDGES AND AGREES THAT IT IS EXECUTING THIS AGREEMENT VOLUNTARILY AND WITHOUT ANY DURESS OR UNDUE INFLUENCE BY THE COMPANY OR ANYONE ELSE. CONSULTANT FURTHER ACKNOWLEDGES AND AGREES THAT IT HAS CAREFULLY READ THIS AGREEMENT AND THAT CONSULTANT HAS ASKED ANY QUESTIONS NEEDED FOR CONSULTANT TO UNDERSTAND THE TERMS, CONSEQUENCES AND BINDING EFFECT OF THIS AGREEMENT AND FULLY UNDERSTAND IT, INCLUDING THAT ***CONSULTANT IS WAIVING ITS RIGHT TO A JURY TRIAL***. FINALLY, CONSULTANT AGREES THAT IT HAS BEEN PROVIDED AN OPPORTUNITY TO SEEK THE ADVICE OF AN ATTORNEY OF CONSULTANT'S CHOICE BEFORE SIGNING THIS AGREEMENT.

14. Miscellaneous

A. ***Governing Law; Consent to Personal Jurisdiction.*** This Agreement shall be governed by the laws of the State of Massachusetts, without regard to the conflicts of law provisions of any jurisdiction. To the extent that any lawsuit is permitted under this Agreement, the Parties hereby expressly consent to the personal and exclusive jurisdiction and venue of the state and federal courts located in Massachusetts.

B. ***Assignability.*** Consultant may assign any or all of his obligations and any or all of his rights under this Agreement to any entity which Consultant may at the relevant time substantially own or control including, without limitation, Verdyne Corporation, a Verdine family trust, or an LLC so long as Greg Verdine directly and personally renders all of the Services and Greg Verdine remains liable for all obligations of Consultant. This Agreement will be binding upon Consultant's heirs, executors, assigns, administrators, and other legal representatives, and will be for the benefit of the Company, its successors, and its assigns. There are no intended third-party beneficiaries to this Agreement, except as expressly stated. Except as may otherwise be provided in this Agreement, Consultant may not sell, assign or delegate any rights or obligations under this Agreement. Notwithstanding anything to the contrary herein, Company may assign this Agreement and its rights and obligations under this Agreement to any successor to all or substantially all of Company's relevant assets, whether by merger, consolidation, reorganization, reincorporation, sale of assets or stock, or otherwise.

C. ***Entire Agreement.*** This Agreement constitutes the entire agreement and understanding between the Parties with respect to the subject matter herein and supersedes all prior written and oral agreements, discussions, or representations between the Parties. Consultant represents and warrants that he is not relying on any statement or representation not contained in this Agreement.

D. ***Headings.*** Headings are used in this Agreement for reference only and shall not be considered when interpreting this Agreement.

E. ***Severability.*** If a court or other body of competent jurisdiction finds, or the Parties mutually believe, any provision of this Agreement, or portion thereof, to be invalid or unenforceable, such provision will be enforced to the maximum extent permissible so as to effect the intent of the Parties, and the remainder of this Agreement will continue in full force and effect.

F. ***Modification, Waiver.*** No modification of or amendment to this Agreement, nor any waiver of any rights under this Agreement, will be effective unless in a writing signed by the Parties. Waiver by either Party of a breach of any provision of this Agreement will not operate as a waiver of any other or subsequent breach.

G. ***Notices.*** Any notice or other communication required or permitted by this Agreement to be given to a Party shall be in writing and shall be deemed given (i) if delivered personally or by commercial messenger or courier service, (ii) when sent by confirmed facsimile, or (iii) if mailed by U.S. registered or certified mail (return receipt requested), to the Party at the Party's address written below or at such other address as the Party may have previously specified by like notice. If by mail, delivery shall be deemed effective three (3) business days after mailing in accordance with this Section 14.G.

(1) If to the Company, to:

419 Western Avenue ,Boston, Mass. 02135
Attention: Ken Takanashi

(2) If to Consultant, to the address for notice on the signature page to this Agreement or, if no such address is provided by Consultant to the Company.

H. ***Attorneys' Fees.*** In any court action at law or equity that is brought by one of the Parties to this Agreement to enforce or interpret the provisions of this Agreement, the prevailing Party will be entitled to reasonable attorneys' fees, in addition to any other relief to which that Party may be entitled. The "prevailing Party" means the Party determined to have most nearly prevailed, even if such Party did not prevail in all matters, and not necessarily the one in whose favor an award, judgment or final order is rendered or issued.

I. ***Signatures.*** This Agreement may be signed in two (2) counterparts, each of which shall be deemed an original, and both of which together shall constitute one (1) document.

(signature page follows)

IN WITNESS WHEREOF, the Parties hereto have executed this Consulting Agreement as of the date first written above.

CONSULTANT		**ONTORII, INC.**	
By:	/s/ Gregory L. Verdine	By:	/s/ Ken Takanashi
Name:	Gregory L. Verdine	Name:	Ken Takanashi
Title:		Title:	Director

Address for Notice:

[Address]

EXHIBIT A

SERVICES AND COMPENSATION

1. ***Contact.*** Consultant's principal Company contact:

Name: Ken Takanashi

Title: Director / Corporate Secretary

Email: _____

Phone: _____

2. ***Services.*** The Services will be the following:

Consultant shall provide research and development advice relating to the use of oligonucleotides and modified versions thereof as drugs, and Consultant shall serve as Co-Chair of the Company's Scientific Advisory Board. Consultant shall provide approximately one (1) day, which is defined to be a maximum of eight (8) hours, per week of Services to the Company during the term of this Agreement.

3 ***Compensation.***

A. The Company will pay Consultant $12,500 per month, or any part of a calendar month, for the Services provided hereunder until this Agreement terminates. This payment will be made automatically, in arrears, on a monthly basis, with no invoicing. The accumulated fees due for the period between April 1, 2012 and the signing date of this agreement will be paid immediately upon signing, in one lump sum, in recognition of the Consultant's having provided services during that period.

B. The Company will reimburse Consultant, in accordance with Company policy, for all reasonable expenses incurred by Consultant in performing the Services pursuant to this Agreement, if Consultant receives written consent from an authorized agent of the Company for incurring such expenses and submits receipts for such expenses to the Company in accordance with Company policy.

This **Exhibit A** is accepted and agreed upon as of 1st April 2012.

CONSULTANT		**ONTORII, INC.**	
By:	/s/ Gregory L. Verdine	By:	/s/ Ken Takanashi
Name:	Gregory L. Verdine	Name:	Ken Takanashi
Title:		Title:	Director

Miura & Associates
Management Consultants Pte Ltd
Registration no. 198901974K

23 October 2012

Mr Ken Takanashi
Wave Life Sciences Pte Ltd
8 Cross Street #10-00
PWC Building
Singapore 048424

Dear Sir

Nominee Director Fee

We are pleased to quote you our nominee director's fee as follows:

Nominee director's fee	: S$3,000 per year
Monthly bill (as requested)	: S$250 per month

Our Mr Koji Miura will act as a nominee director for your company. The nominee director's fee of S$3,000/- is for a period of one year. We will render the bill to your company on a monthly basis as per your request. The fee is payable upon the presentation of our bill to you. The resignation of the nominee director may be requested in writing by either party. The director's fee will be payable until the month of the director's resignation. If you agree to the above fees, please sign on the enclosed copy of this letter and return it to us.

Yours faithfully

/s/ Koji Miura

Koji Miura
Managing Director

Enc

Miura & Associates
Management Consultants Pte Ltd
Registration no. 198901974K

23 October 2012

Mr Ken Takanashi
Wave Life Sciences Pte Ltd
8 Cross Street #10-00
PWC Building
Singapore 048424

Dear Sir

Nominee Director Fee

We are pleased to quote you our nominee director's fee as follows:

Nominee director's fee	: S$3,000 per year
Monthly bill (as requested)	: S$250 per month

Our Mr Koji Miura will act as a nominee director for your company. The nominee director's fee of S$3,000/- is for a period of one year. We will render the bill to your company on a monthly basis as per your request. The fee is payable upon the presentation of our bill to you. The resignation of the nominee director may be requested in writing by either party. The director's fee will be payable until the month of the director's resignation. If you agree to the above fees, please sign on the enclosed copy of this letter and return it to us.

Yours faithfully

/s/ Koji Miura

Koji Miura
Managing Director

I agree to the above fees.

Signature/Name	Date

3 Shenton Way • #18-01 SGX Centre 1 • Singapore 068804 • Direct: +65 6534 1939 • Tel: +65 6438 9810 • Fax: +65 6534 1170 • www.miura.sg

Exhibit 10.18

*****Text Omitted and Filed Separately with the Securities and Exchange Commission. Confidential Treatment Requested 17 C.F.R. Section 200.80(b)(4) and Rule 406 of the Securities Act of 1933, as amended.**

THIS AGREEMENT dated 23rd September, 2015 is made **BETWEEN:**

(1) **THE UNIVERSITY OF DUNDEE**, established by Royal Charter dated 20 July 1967 and a registered Scottish charity (charity number SC015096) and having its principal office at 149 Nethergate, Dundee DD1 4HN ("the University"); and

(2) **WAVE LIFE SCIENCES, PTE. LTD**, a company registered under the laws of Singapore, with corporate offices at 419 Western Avenue, Boston MA 02135 ("the Sponsor")

1. **DEFINITIONS**

In this Agreement the following expressions have the meaning set opposite:

Academic Publication:	the publication of an abstract, article or paper in a journal or an electronic repository; its presentation at a conference or seminar; or press release or other public announcement; and in clauses 5 and 6 "to Publish" and "Publication" are to be construed accordingly;
Affiliate	with respect to any Party, any other person or entity which directly or indirectly controls, is controlled by, or is under common control with, such Party. A person or entity, such as a corporation, partnership, limited liability company, trust, business trust, association, joint venture, non-profit organization, or university shall be regarded as in control of another Party if it owns, or directly or indirectly controls, at least fifty percent (50%) of the voting stock or other ownership interest of such Party, or if it directly or indirectly possesses the power to direct or cause the direction of the management and policies of a Party by any means whatsoever.
this Agreement:	this document, including its Schedules, as amended from time to time in accordance with clause 10.9;
Background Information, Materials & IP:	(i) information, data, techniques, Know-how, software and Materials that are owned or controlled by a Party (regardless of the form or medium in which they are disclosed or stored) and that are provided by such Party to the other for use in the Project during the Project Period, whether existing before or after the date of this Agreement and (ii) Intellectual Property that is owned or controlled by a Party prior to carrying out the Project or is conceived, developed or first reduced to practice by a Party independently of the Project and provided by such Party for use in the Project during the Project Period.

a Business Day:	Monday to Friday (inclusive) except bank or public holidays in Scotland and the United States;
Confidential Information:	any (i) Background Information, Materials & IP disclosed by a Party to the other for use in the Project and identified as confidential before or within [***] days of the time of disclosure; (ii) Research Reports; and (iii) Results;
the Effective Date:	1 September 2015
the Financial Contribution:	the financial contribution to be provided by the Sponsor set out in Schedule 1;
the Good Data Management Practices:	the practices and procedures set out in Schedule 3;
Intellectual Property:	patents, trade marks, service marks, registered designs, copyrights, database rights, design rights, confidential information, trade secrets, applications for any of the above, and any similar right recognised from time to time in any jurisdiction, or other rights issuing from, or filed subsequent to the date of this Agreement, based on or claiming priority to or from the applications, patents, and rights listed above, including but not limited to continuations, continuations in part, divisionals, reexaminations, extensions, reissues, substitutions, renewals, supplementary protection certificates, registrations, and confirmations of any of the foregoing, and any patents resulting from any such application or right, together with all rights of action in relation to the infringement of any of the above;
Inventions	Any data or information, processes, compositions of matter, learnings, improvements and Know-how, whether or not patentable, conceived or reduced to practice by any Party in the course of performing the Project that may be used in support of or as the basis or foundation for Intellectual Property.

the Key Personnel:	the Principal Investigator and any other key personnel identified in Schedule 2;
Know-how	unpatented technical information including, without limitation, information relating to inventions, discoveries, concepts, methodologies, models, research, development and testing procedures, the results of experiments, tests and trials, manufacturing processes, techniques and specifications, quality control data, prototypes, analyses, reports and submissions, trade secrets, in all cases whether or not patentable and that is not in the public domain, and specifically, without limiting the foregoing: (i) data and information relating to the engineering, design or manufacture of stereo-controlled or stereo-pure nucleic acid based molecules; (ii) the general chemical stability, metabolism, pharmacokinetic or pharmacodynamics effect of stereo-controlled or stereo-pure nucleic acid based molecules; and (iii) the use of stereo-controlled or stereo-pure nucleic acid based molecules to treat disease;
the Location:	the location(s) at which the Project will be carried out as set out in Schedule 2;
Materials	proprietary original material, progeny (every descendant from the Material), derivatives (a functional subunit of Material), any substance expressed by or from Material and modifications (substances created by the Recipient which contain or incorporate Material or through use of Material), or any chemical compound derivatives, modifications and improvements, fragments or portion thereof and associated Know-how, information and data provided by the Sponsor to the University under this Agreement and listed in Schedule 2 to this Agreement;
Party	The Sponsor or the University are each referred to as a “Party” or collectively as the “Parties”;
the Principal Investigator:	Dr Robyn Hickerson of the University or her successor appointed under clause 9.2;
the Project:	the programme of work described in Schedule 2, as amended from time to time in accordance with clause 10.9;

the Project Period:	the period described in clause 2.1;
the Results:	all (i) data, information, Know-how or Inventions first generated in the course of the Project, including underlying data, observations, theses, hypotheses and conclusions drawn therefrom and (ii) Intellectual Property conceived, developed, identified or first reduced to practice or writing in the course of the Project;
the Sponsor's Supervisor:	Chandra Vargeese, Ph.D.

2. **THE PROJECT**

2.1 The Project will begin on the Effective Date and will continue until for a period of twenty-four (24) months or until any later date agreed in writing between the parties, or until this Agreement is terminated in accordance with clause 8 or 9.

2.2 Each of the parties will carry out the tasks allotted to it in Schedule 2, and will provide the human resources, materials, facilities and equipment that are designated as its responsibility in Schedule 2. The Project will be carried on under the direction and supervision of the Sponsor's Supervisor. The Project will be carried out at the Location.

2.3 Each of the parties will use all reasonable endeavours to obtain all regulatory and ethical licences, consents and approvals necessary to allow it to carry out the tasks allotted to it in Schedule 2.

2.4 Each of the parties will ensure that its employees and students (if any) involved in the Project: (i) observe the conditions attaching to any regulatory and ethical licences, consents and approvals; (ii) keep complete and accurate records of all research, development and other work carried out in connection with the Project and of all Results and observations, signed by the people who obtained each Result or made those observations, and countersigned by an employee of that Party who is not a member of the research team but who understands the work; and (iii) comply with the Good Data Management Practices.

2.5 Although each of the parties will use reasonable endeavours to carry out the Project in accordance with Schedule 2, neither Party undertakes that any research will lead to any particular result, nor does it guarantee a successful outcome to the Project.

2.6 The University will keep the Sponsor advised of the progress of the Project and will provide the Sponsor with reports as it reasonably requests from time to time, but on no less than a monthly basis. Such reports may be in email format and shall summarise the progress of the Project and detail the Results (each such report an "Interim Report"). Within [***] days following completion of the Project, the University agrees to furnish the Sponsor with a formal written report setting forth all the Results generated in performing Project ("Final Report"). Such Interim Reports and the Final Report shall be collectively referred to as the "Research Reports" and the Research Reports shall be Confidential Information under this Agreement. The

University shall use its reasonable efforts to ensure that the Research Reports include a clear, detailed and accurate description of the Results and include sufficient detail (when viewed collectively) to adequately support patent applications relating to any Inventions. During the Project Period, the Principal Investigator and the Sponsor's Supervisor and other representatives of the Parties as required will meet at times (but no less than quarterly) and places mutually agreed upon, including by teleconference, with the purpose of reviewing the progress and Results, as well as ongoing plans, changes or amendments to the Project and identifying any Inventions arising from the collaboration.

2.7 Each of the parties warrants to the other that it has full power and authority under its constitution, articles of association, by-laws, or other operating documents, and has taken all necessary actions and obtained all authorisations, licences, consents and approvals, to allow it to enter into this Agreement.

3. FINANCIAL CONTRIBUTION AND EXTERNAL FUNDING

3.1 The University will keep complete and accurate accounts of its expenditure on the Project. The Sponsor will pay the Financial Contribution to the University in accordance with Schedule 1 within [***] days after receipt by the Sponsor of [***] invoices. Where the Financial Contribution is being claimed against costs and expenses incurred by the University, each invoice must be accompanied by a statement certified by an authorised officer of the University.

3.2 All amounts payable to the University under this Agreement are exclusive of VAT (or any similar tax) which the Sponsor will pay at the rate from time to time prescribed by law.

3.3 If the Sponsor fails to make any payment due to the University under this Agreement, without prejudice to any other right or remedy available to the University, the University may charge interest (both before and after any judgement) on the amount outstanding, on a daily basis at the rate of [***] per cent ([***]%) per annum above the London Interbank Offer Rate from time to time in force. That interest will be calculated from the date or last date for payment to the actual date of payment, both dates inclusive, and will be compounded annually. The Sponsor will pay that interest to the University on demand.

3.4 Except as set out in Schedule 2, the University will own all equipment purchased or constructed by it, or for it, using the Financial Contribution.

4. USE AND EXPLOITATION OF INTELLECTUAL PROPERTY

4.1 Each Party shall disclose Background Information, Materials & IP owned or controlled by it to the Project that it believes is reasonably required to enable or further the Project. This Agreement does not affect the ownership of any (i) Background Information, Materials & IP or (ii) technology, design, work, invention, software, data, technique, Know-how, or materials that are not Results and, accordingly, the Parties hereto agree that all right, title and interest in the Background Information, Materials & IP of each Party will remain the property of each such Party (or its licensors, as applicable). No licence to use any Background Information, Materials & IP or any other Intellectual Property is granted or implied by this Agreement except the rights expressly granted in this Agreement.

4.2 Each Party grants the other a limited, royalty-free, fully paid, non-exclusive licence to use its Background Information, Materials & IP for the purpose of carrying out the Project during the Project Period, but for no other purpose. Neither Party may grant any sub-licence to use the other's Background Information, Materials & IP except that the Sponsor may allow its Affiliates and any person or entity working for or on behalf of the Sponsor or its Affiliates to use the University's Background Information, Materials & IP for the purpose of carrying out the Project and subject to confidentiality terms at least as restrictive as those set out in section 6 below.

4.3 The University shall not duplicate or reverse engineer the Materials provided by the Sponsor pursuant to the Project or disseminate the Materials to any third party. The University agrees that persons who may have access to the Material shall be limited to its Principal Investigator and his direct reports. The University shall not use the Material for diagnosing, testing in or treatment of human subjects. The University shall comply with all applicable laws and regulations applicable to the handling, use and disposal of the Material. Any Material remaining upon completion of the Project shall either be returned to the Sponsor or discarded consistent with Sponsor's written instructions and applicable laws and regulations.

4.4 The Sponsor will own the Intellectual Property in the Results and may take such steps as it may decide from time to time, and at its own expense, to register and maintain any protection for Intellectual Property included in the Results, including filing and prosecuting patent applications for any of the Inventions included in the Results, in each case without additional compensation or consideration to the University. Where a third party such as a student or contractor is involved in the Project, the University or the Party engaging that contractor (as the case may be) will ensure that the student and the contractor assign any Intellectual Property they may have in the Results in order to be able to give effect to the provisions of this clause 4. The University will ensure that its employees and students involved in the creation of the Results give the Sponsor such assistance as the Sponsor may reasonably request in connection with the registration and protection of the Intellectual Property in the Results, including filing and prosecuting patent applications for any Inventions included in the Results, and taking any action in respect of any alleged or actual infringement of the resulting Intellectual Property. The University will assign and does hereby irrevocably assign all of its rights, title and interest to the Results to the Sponsor. The University shall cooperate in good faith with Sponsor and shall take all measures and execute all documents as are necessary to assign all of its right, title and interest to the Sponsor, and perfect title solely in the name of Sponsor, for all of the Intellectual Property pertaining to the Results, and to facilitate the filing, prosecution, defence and enforcement of all such Intellectual Property by the Sponsor, at Sponsor's sole cost.

4.5 The University will notify the Sponsor promptly after identifying any Results that the University believes may constitute Inventions, and will supply the Sponsor with copies of such Results. The University will notify other Results to the Sponsor in the reports provided under clause 2.4 and the Research Reports 2.6. The University will not file any patent applications relating to the Results and hereby confirms that if it does, it will irrevocably assign and hereby irrevocably assigns such patent applications to the Sponsor for no additional consideration.

4.6 The Sponsor grants the University a royalty-free, non-exclusive licence to use the Results for the purpose of carrying out the Project, and in accordance with Clause 4.7 below, but for no other purpose. The University may not grant any sub-licence to use the Results. Upon the completion of the Project, the license granted to the University under this clause 4 shall automatically and immediately terminate except as otherwise specifically stated herein.

4.7 Despite the assignment or agreement to assign under clause 4.4, the University, its employees and students will have the irrevocable, royalty-free right to use the Results for the purposes of the University's own internal academic teaching and other scholarly uses that are undertaken for the sole purpose of education and academic research. Notwithstanding the foregoing, the rights in this clause are subject to the rules on Academic Publication in clause 5 and confidentiality in clause 6. For clarity, such academic and research purposes shall not extend to the use of the Results in collaboration with any for-profit or commercial third party where such party would be granted any (i) rights to commercially exploit the Results in any way; nor (ii) access to any of the Sponsor's Background Information, Materials & IP or the Research Reports.

4.8 The Sponsor will provide the University with such information as the University may reasonably request from time to time to demonstrate that the Sponsor is exploiting or is taking reasonable steps towards exploiting the Results. If the Sponsor does not demonstrate that it is exploiting any of the Results or is taking reasonable steps towards exploiting them, then the Sponsor may, in its discretion, elect to abandon any patent applications or issued patent included in the Intellectual Property arising or derived from any Invention included in the Results (the "Abandoned IP"). Following such abandonment, the University shall have the right, but not the obligation, to commence or continue such prosecution and to maintain any such patent or patent application under its own control and at its own expense and such patent or patent application shall thereafter be excluded from the definition of Results for purposes of this Agreement. Prior to any such abandonment, the Sponsor shall give the University at least [***] notice and a reasonable opportunity to take over prosecution of such patent or patent application. The Sponsor agrees to cooperate in such activities including execution of any documents necessary to enable University to retain ownership and control of such patent or patent application and, if necessary, will assign, and hereby assigns, all of its rights and interest to such Abandoned IP to the University.

5. **ACADEMIC PUBLICATION**

5.1 Subject to clause 5.2 an employee or student of the University (whether or not involved in the Project) may, provided a Confidentiality Notice under clause 5.2 has not been given:

5.1.1 Discuss work undertaken as part of the Project in University seminars, tutorials and lectures; and

5.1.2 Publish the Results, including any Background Information, Materials & IP of the Sponsor (unless it is the Sponsor's Confidential Information) in support of the Results.

5.2 The Sponsor and the University anticipate that a high impact academic Publication will arise following the successful conduct of the Project, and nothing in this Agreement shall prevent or hinder the University from seeking to publish such a Publication, provided that the procedure in this clause 5.3 is followed. The University will submit to the Sponsor, in writing, a copy of the proposed Publication at least 30 days before the date of the proposed submission for Publication. The Sponsor may, by giving written notice to the University ("a Confidentiality Notice"):

(a) require the University to delay the proposed Publication for a maximum of [***] months after receipt of the Confidentiality Notice if, in the Sponsor's reasonable opinion, that delay is necessary in order to seek patent or similar protection for any of the Sponsor's Background Information, Materials & IP or any Results that are to be Published; or

(b) prevent the Publication of any of the Sponsor's Background Information, Materials & IP that is Confidential Information. For the avoidance of doubt the University shall not publish the full stereochemical and chemical structure of any of the Sponsor's Background Information, Materials & IP without the prior written consent of the Sponsor, provided that the Sponsor will consent to the University disclosing in a Publication sufficient information about the nature of the Sponsor's Background Information, Materials & IP and the potential use of the same in the treatment of Muscular Dystrophy as would ordinarily be required of a high quality academic Publication.

The Sponsor must give that Confidentiality Notice within [***] days after the Sponsor receives a copy of the proposed Publication. If the University does not receive a Confidentiality Notice within such [***] day period, its employee or student may proceed with the proposed Publication, provided that, whether or not a Confidentiality Notice has been given, any of the Sponsor's Background Information, Materials & IP that is Confidential Information may not be published.

6. **CONFIDENTIALITY**

6.1 Subject to clause 5, neither Party will disclose to any third party, nor use for any purpose except carrying out the Project, any of the other Party's Confidential Information.

6.2 Neither Party will be in breach of any obligation to keep any Background Information, Materials & IP, Results or other information confidential or not to disclose it to any third party to the extent that it:

6.2.1 was known to the Party making the disclosure before its receipt from the other Party, as demonstrated by written records or other tangible documentation, and is not otherwise subject to an obligation of confidentiality to the other Party;

6.2.2 is, as of the date of this Agreement, in the public domain, or subsequently enters the public domain through no fault of the receiving Party

6.2.3 has been obtained by the Party making the disclosure from a third party in lawful possession of such information in circumstances where the Party making the disclosure has no reason to believe that there has been a breach of an obligation of confidentiality owed to the other Party;

6.2.4 is independently developed by the Party making the disclosure as demonstrated by written or other tangible evidence without reference to or benefit of information disclosed to it by the other Party;

6.2.5 is disclosed pursuant to the requirement of any law or regulation (provided, in the case of a disclosure under the Freedom of Information (Scotland) Act 2002 ("the Act"), none of the exceptions to that Act applies to the information disclosed) or the order of any court of competent jurisdiction, and the Party required to make that disclosure has informed the other of the requirement and the information required to be disclosed, provided, however, that:

(a) in the event that either Party hereto is required by applicable statute or regulation or by judicial or administrative process to disclose any part of the Confidential Information which is disclosed to it hereunder pursuant to this clause 6.2.5, the receiving Party shall (i) promptly notify the disclosing Party of each such requirement and identify the Confidential Information required to be disclosed by such order, regulation, or law so that the disclosing Party, at its expense, may seek an appropriate protective order or other remedy and (ii) consult with the disclosing Party on the advisability of taking legally available steps to resist or narrow the scope of such requirement; and

(b) if, in the absence of such a protective order the receiving Party is nonetheless required by mandatory applicable law to disclose any part of the Confidential Information which is disclosed to it hereunder, the receiving Party may make such required disclosure of Confidential Information without liability under this Agreement, provided that the receiving Party shall furnish only that portion of the Confidential Information which it is legally required under such order, law or regulation; or

6.2.6 is approved for release in writing by an authorised representative of the other Party.

6.3 The University will not be in breach of any obligation to keep any of the Sponsor's Background Information, Materials & IP that is not Confidential Information, or any Results, by Publishing any of the same if the University has followed the procedure in clause 5.2 and has received no Confidentiality Notice within the period stated in that clause.

6.4 The Sponsor will not be in breach of any obligation to keep any of the University's Background Information, Materials & IP, or other information, confidential or not to disclose them to any third party, by making them available to any Affiliate, or any person working for or on behalf of the Sponsor or an Affiliate, who needs to know the same in order to exercise the rights granted in this Agreement, provided they are not used except as expressly permitted by this Agreement and the recipient undertakes to keep that Background Information, Materials & IP confidential.

6.5 If the University receives a request under the Act to disclose any information that, under this Agreement, is the Sponsor's Confidential Information, it will notify the Sponsor and will consult with the Sponsor promptly and before making any disclosure under that Act. The Sponsor will respond to the University within 10 days after receiving the University's notice. If that notice requests that the Sponsor provide information to assist the University to determine whether or not an exemption to the Act applies to the information requested under that Act, the Sponsor will use its reasonable efforts to provide such information promptly.

6.6 Neither the University nor the Sponsor will use the other's name or logo in any press release or product advertising, or for any other promotional purpose, without first obtaining the other's written consent, except that: (i) the University may (a) identify the sums received from the Sponsor in the University's Annual Report and similar publications; disclose certain information pertaining to the Project for the purposes of assessment of the quality of the research undertaken, and use in the University's marketing material; (ii) the Sponsor may disclose the existence of this Agreement to its investors or prospective investors; and (iii) as otherwise required by law or regulation.

7. LIMITATION OF LIABILITY

7.1 Neither of the parties, except under clause 7.8, makes any representation or gives any warranty to the other that any advice or information given by it or any of its employees or students who work on the Project, or the content or use of any Results or Background Information, Materials & IP will not constitute or result in any infringement of third-party rights.

7.2 Except under the limited warranty in clause 7.8 and the indemnity in clause 7.3, and subject to clause 7.6, neither Party accepts any liability or responsibility for any use which may be made by the other Party of any Results, nor for any reliance which may be placed by that other Party on any Results, nor for advice or information given in connection with any Results.

7.3 The Sponsor will indemnify the University and the Principal Investigator and his direct reports (the Indemnified Parties), and keep them fully and effectively indemnified, against each and every claim made against any of the Indemnified Parties as a result of the Sponsor's use of any of the Results or any materials, works or information received from them pursuant to the terms of this Agreement, provided that the Indemnified Party must:

7.3.1 promptly notify the Sponsor of details of the claim;

7.3.2 not make any admission in relation to the claim;

7.3.3 allow the Sponsor to have the conduct of the defence or settlement of the claim; and

7.3.4 give the Sponsor all reasonable assistance (at the Sponsor's expense) in dealing with the claim.

Notwithstanding the foregoing, the indemnity in this clause will not apply to the extent that the claim arises as a result of the Indemnified Party's negligence, its breach of clauses 5 or 6, the deliberate breach of this Agreement or its knowing infringement of any third party's Intellectual Property.

7.4 Subject to clause 7.6, and except under the indemnity in clause 7.3, the liability of either Party to the other for any breach of this Agreement, any negligence or arising in any other way out of the subject matter of this Agreement, the Project and the Results, shall not extend: (i) to any indirect damages or losses; nor (ii) to any loss of profits, loss of bargain, loss of revenue, loss of business, or loss of opportunity, whether direct or indirect, even if, in any such case, the Party bringing the claim has advised the other of the possibility of those losses.

7.5 Subject to clause 7.6, and except under the indemnity in clause 7.3, the aggregate liability of each Party to the other for all and any breaches of this Agreement, any negligence or arising in any other way out of the subject matter of this Agreement, the Project and the Results, will not exceed in total the Financial Contribution.

7.6 Nothing in this Agreement limits or excludes either Party's liability for:

7.6.1 death or personal injury;

7.6.2 any fraud or for any sort of liability that, by law, cannot be limited or excluded; or

7.6.3 any loss or damage caused by a deliberate breach of this Agreement or a breach of clauses 4.3, 4.4, 4.5, 4.7, 5 or 6.

7.7 The express undertakings and warranties given by the parties in this Agreement are in lieu of all other warranties, conditions, terms, undertakings and obligations, whether express or implied by statute, common law, custom, trade usage, course of dealing or in any other way. All of these are excluded to the fullest extent permitted by law.

7.8 The University warrants to the Sponsor that, to the best of its knowledge and belief but without having undertaken any searches, in relation to any assignment made under or pursuant to clause 4.4 and 4.5:

7.8.1 the University has the right to dispose of the Intellectual Property in the Results and that the University it will, at its own cost, do all that it reasonably can to give the title that it purports to give; and

7.8.1 that the Intellectual Property in the Results is free from all charges and encumbrances and rights of any third party (except those that the University is unaware or could not reasonably be aware of).

8. FORCE MAJEURE

If the performance by either Party of any of its obligations under this Agreement, except a payment obligation, is delayed or prevented by circumstances beyond its reasonable control, that Party will not be in breach of this Agreement because of that delay in performance. However, if the delay in performance is more than 6 months, the other Party may terminate this Agreement with immediate effect by giving written notice to the other Party.

9. TERMINATION

9.1 Either Party may terminate this Agreement with immediate effect by giving notice to the other Party if:

9.1.1 the other Party is in breach of any provision of this Agreement and, if it is capable of remedy, the breach has not been remedied within 60 days after receipt of written notice specifying the breach and requiring its remedy; or

9.1.2 the other Party shall become bankrupt, or shall file a petition in bankruptcy, or if the business of the Sponsor shall be placed in the hands of a receiver, assignee or trustee for the benefit of creditors, whether by the voluntary act of the Sponsor or otherwise.

9.2 Each of the parties will notify the other promptly if at any time any of the Key Personnel appointed by that Party is unable or unwilling to continue to be involved in the Project. Within 2 months after the date of that notice, the Party who originally appointed that member of the Key Personnel will nominate a successor. The other Party will not unreasonably refuse to accept the nominated successor, but if the successor is not acceptable to the other Party on reasonable grounds, or if the appointor cannot find a successor, either Party may terminate this Agreement by giving the other not less than 2 months' notice.

9.3 Clauses 1, 3, 4, 5, 6, 7, 9.3, 9.4, 9.5 and 10 will survive the expiry of the Project Period or the termination of this Agreement for any reason and will continue indefinitely.

9.4 On the termination of this Agreement, the Sponsor will pay the University for all work done prior to termination. If the Sponsor has paid any of the Financial Contribution in advance and the whole of that contribution has not, by the end of the Project Period or the termination of this Agreement, been used by the University for the purposes for which that Financial Contribution was provided, the University will return to the Sponsor the unused portion of that contribution.

9.5 Following the termination of this Agreement by the Sponsor under clause 9.2, if the Financial Contribution includes the costs of employing any University staff involved in the Project, the Sponsor will continue to reimburse, in accordance with clause 3, the

actual direct employment costs of staff who were appointed by the University to work on the Project before the service of the notice, and any other non-cancellable commitments, provided that the University takes all reasonable steps to minimise those costs. Reimbursement will continue until the effective date of termination of each staff contract or the date on which the Project was to have ended (whichever is the earlier). Those direct employment costs will include a proportion of any redundancy costs that have been incurred by the University as a direct result of the termination of this Agreement, that proportion to be calculated by dividing the individual's involvement in the Project by the duration of his period of employment by the University.

10. **GENERAL**

10.1 **Notices:** Any notice to be given under this Agreement must be in writing, may be delivered to the other Party or parties by any of the methods set out in the left hand column below, and will be deemed to be received on the corresponding day set out in the right hand column:

Method of service	**Deemed day of receipt**
By hand or courier	the day of delivery
By pre-paid first class post	the third Business Day after posting
By recorded delivery post	the second Business Day after posting

The parties' respective representatives for the receipt of notices are, until changed by notice given in accordance with this clause, as follows:

For the University:	**For the Sponsor:**
Name: Ms Diane Taylor	Name: Chandra Vargeese
Address: University of Dundee Research and Innovation Services 11 Perth Road Dundee DD1 4HN Scotland	Address: c/o Wave Life Sciences Pte Ltd 419 Western Avenue Boston, MA 02135 USA
email address: [***]	email address: [***]

10.2 **Headings:** The headings in this Agreement are for ease of reference only; they do not affect its construction or interpretation.

10.3 **Assignment:** Neither Party may assign or transfer this Agreement as a whole, or any of its rights or obligations under it, without first obtaining the written consent of the other Party and that consent may not be unreasonably withheld or delayed. Notwithstanding the foregoing, provided that it gives reasonable notice to the

University, the Sponsor may assign this Agreement without the consent of the University (i) to a purchaser, merging, or consolidating corporation, or acquirer of all or substantially all of its assets or business (or that portion thereof to which this Agreement relates) and/or pursuant to any reorganization of such part or (ii) to an Affiliate of the Sponsor.

10.4 **Illegal/unenforceable provisions:** If the whole or any part of any provision of this Agreement is void or unenforceable in any jurisdiction, the other provisions of this Agreement, and the rest of the void or unenforceable provision, will continue in force in that jurisdiction, and the validity and enforceability of that provision in any other jurisdiction will not be affected.

10.5 **Waiver of rights:** If a Party fails to enforce, or delays in enforcing, an obligation of the other Party, or fails to exercise, or delays in exercising, a right under this Agreement, that failure or delay will not affect its right to enforce that obligation or constitute a waiver of that right. Any waiver of any provision of this Agreement will not, unless expressly stated to the contrary, constitute a waiver of that provision on a future occasion.

10.6 **No agency:** Nothing in this Agreement creates, implies or evidences any partnership or joint venture between the parties, or the relationship between them of principal and agent. Neither Party has any authority to make any representation or commitment, or to incur any liability, on behalf of the other.

10.7 **Entire agreement:** This Agreement constitutes the entire agreement between the parties relating to its subject matter. Each Party acknowledges that it has not entered into this Agreement on the basis of any warranty, representation, statement, agreement or undertaking except those expressly set out in this Agreement. Each Party waives any claim for breach of this Agreement, or any right to rescind this Agreement in respect of, any representation which is not an express provision of this Agreement. However, this clause does not exclude any liability which either Party may have to the other (or any right which either Party may have to rescind this Agreement) in respect of any fraudulent misrepresentation or fraudulent concealment prior to the execution of this Agreement.

10.8 **Intentionally deleted**

10.9 **Amendments:** No variation or amendment of this Agreement will be effective unless it is made in writing and signed by each Party's representative.

10.10 **Third parties:** No one except a Party to this Agreement has any right to prevent the amendment of this Agreement or its termination, and no one except a Party to this Agreement may enforce any benefit conferred by this Agreement, unless this Agreement expressly provides otherwise.

10.11 **Governing law:** This Agreement is governed by, and is to be construed in accordance with, Scots law. The Scottish Courts will have exclusive jurisdiction to deal with any dispute which has arisen or may arise out of or in connection with this Agreement, except that either Party may bring proceedings for an injunction in any jurisdiction.

10.12 **Escalation:** If the parties are unable to reach agreement on any issue concerning this Agreement or the Project within [***] days after one Party has notified the other of that issue, they will refer the matter to Director of Research Services in the case of the University, and to its Chief Executive Officer in the case of the Sponsor in an attempt to resolve the issue within [***] days after the referral. Either Party may bring proceedings in accordance with clause 10.11 if the matter has not been resolved within that [***] day period, and either Party may apply to the court for an injunction, whether or not any issue has been escalated under this clause.

SIGNED for and on behalf of the University:

Name: Graham Cowan

Position: Head of Contracts & IP Management Research & Innovation Services

Signature /s/ Graham Cowan

Read and understood by the Principal Investigator

Name: Dr Robyn Hickerson

Signature /s/ Robyn Hickerson

Date 28-9-15

SIGNED for and on behalf of the Sponsor:

Name: Paul B. Bolno, M.D,

Position: President & Chief Executive Officer

Signature /s/ Paul B. Bolno

SCHEDULE 1

The Financial Contribution

The Sponsor shall pay to the University the sum of [***] Pounds Sterling (£[***]) ("Financial Contribution") in consideration of the University's work on the Project, in accordance with the following schedule:

[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
Total amount payable	[***]

All amounts in this Schedule exclude VAT.

All payments of the Financial Contribution will be made by bank transfer to the University's bank account:

[***]
[***]
[***]
[***]
[***]

Tel: [***]
Fax: [***]

Account Name: [***]
Sort Code: [***]
Account No: [***]
IBAN number: [***]

SCHEDULE 2

The Project

[Description of Project]

[***]

*****Confidential Treatment Requested*****

SCHEDULE 3

Good Data Management Practices

1. Research data must be generated using sound scientific techniques and processes;
2. Research data must be accurately recorded in accordance with good scientific practices by the people conducting the research;
3. Research data must be analysed appropriately, without bias and in accordance with good scientific practices;
4. Research data and the Results must be stored securely and be easily retrievable;
5. Data trails must be kept to allow people to demonstrate easily and to reconstruct key decisions made during the conduct of the research, presentations made about the research and conclusions reached in respect of the research; and
6. Each Party must have the right, on not less than [***] days written notice, to visit any other Party to verify that it is complying with the above practices and procedures.

Exhibit 21.1

WAVE LIFE SCIENCES PTE. LTD.

Subsidiary	Jurisdiction
WAVE Life Sciences USA, Inc.	Delaware
WAVE Life Sciences (Japan)	Japan

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

The Board of Directors
WAVE Life Sciences Pte. Ltd.:

We consent to the use of our report included herein and to the reference to our firm under the heading “Experts” in the prospectus.

/s/ KPMG LLP

Cambridge, Massachusetts
October 9, 2015

MINTZ LEVIN

Matthew J. Gardella | 617 348 1735 | mgardella@mintz.com

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October 9, 2015

VIA EDGAR & OVERNIGHT MAIL

Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Washington, D.C. 20549

Attention: Suzanne Hayes, Assistant Director
Christina De Rosa
Christian Windsor
Lisa Vanjoske
Joel Parker

Re: WAVE Life Sciences Pte. Ltd.
Draft Registration Statement on Form S-1
Submitted September 4, 2015
CIK No. 0001631574

Ladies and Gentlemen:

We are submitting this letter on behalf of WAVE Life Sciences Pte. Ltd. (the "**Company**") in response to comments from the staff (the "**Staff**") of the Securities and Exchange Commission (the "**Commission**") received by letter dated October 2, 2015 (the "**Comment Letter**"), relating to the above-referenced draft registration statement on Form S-1 of the Company initially submitted to the Commission on September 4, 2015 (the "**Draft Registration Statement**") on a confidential basis pursuant to Title I, Section 106 of the Jumpstart Our Business Startups Act. In conjunction with this letter, the Company is making its initial public filing of a registration statement on Form S-1 dated the date hereof (the "**Registration Statement**") with the Commission, which reflects changes made to the Draft Registration Statement made in response to certain comments contained in the Comment Letter.

For convenient reference, we have set forth below in italics each of the Staff's comments set forth in the Comment Letter and have keyed the Company's responses to the numbering of the comments and the headings used in the Comment Letter. All of the responses are based on information provided to Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. by representatives of the Company. Page numbers referred to in the responses below reference the applicable pages of the Registration Statement.

We are providing by overnight delivery to Ms. Christina De Rosa of the Staff five courtesy copies of this letter and copies of the Registration Statement that have been marked to show changes from the Draft Registration Statement.

Prospectus Summary, page 1

Advantages of Our Approach, page 4

1. *We note your statement that you "are a leader in the manufacturing of PS-modified stereopure nucleic acid therapeutics..." As you do not manufacture any commercial products, this statement appears to be premature. Please qualify the quoted language appropriately.*

   Response: In response to the Staff's comment, the Company has revised the disclosure on pages 5 and 75 of the Registration Statement.

2. *Revise the first bullet point to clarify that you must first identify product candidates and then advance those candidates through the testing and approval process. You should also clarify that your company does not have experience conducting clinical trials or otherwise advancing product candidates through the approval process.*

   Response: In response to the Staff's comment requesting clarification regarding the Company's identification of product candidates and subsequent testing processes, the Company has revised the disclosure on pages 1, 5, 6, 15, 56, 72, 79 and 80 of the Registration Statement.

   In response to the Staff's comment requesting clarification regarding the Company's experience in developing and pursuing regulatory approval of product candidates, the Company has revised the disclosure on pages 7, 15 and 18 of the Registration Statement.

Our Product Pipeline, page 5

3. *Revise the heading to this section to more clearly indicate that you do not, at this time, have any products, but instead you have areas of research focuses which may lead to the identification of product candidates.*

   Response: In response to the Staff's comment, the Company has revised the heading on pages 6 and 80 of the Registration Statement to remove the word "product" from the heading.

Risks Related to Our Business, page 7

4. *Revise this section to clarify that not only do you have a history of losses, but you have not, to date, produced meaningful revenues.*

Response: In response to the Staff's comment, the Company has revised the disclosure on page 7 of the Registration Statement.

Use of Proceeds, page 47

5. *For each therapeutic program that you intend to develop with the proceeds from this offering, please state the anticipated stage of development that you expect to reach using the proceeds of the offering.*

Response: In response to the Staff's comment, the Company has revised the disclosure on page 47 of the Registration Statement.

Management's Discussion and Analysis of Financial Condition and Results of Operations
Critical Accounting Policies and Significant Judgments and Estimates
Share-Based Compensation, page 66

6. *We may have additional comments on your accounting for equity issuances including stock compensation and beneficial conversion features. Once you have an estimated offering price, please provide us an analysis explaining the reasons for the differences between recent valuations of your common stock leading up to the IPO and the estimated offering price.*

Response: The Company acknowledges that the Staff may have additional comments on the Company's accounting for equity issuances, including share compensation and beneficial conversion features. Once the Company discloses an estimated offering price range, it will provide an analysis explaining the reasons for the differences between recent valuations of its ordinary shares leading up to the IPO and the estimated offering price.

Business, page 71

7. *Please revise your disclosure to provide brief explanations of scientific terms to enable a lay investor to understand. For instance, at first use, please define the following terms:*

- *"Stereochemistry technology;"*
- *"Stereopure nucleic acid therapeutics;"*

- *"Stereoisomer mixtures;"*
- *"Antisense;"*
- *"oligonucleotide stereochemistry;"*
- *"Ribonucleic acid interference;"*
- *"Exon skipping;"*
- *"HTT SNP-1 and HTT SNP-2;"*
- *"Exon 51;"*
- *"SMAD7;"*
- *"KRT14 SNP-1 and KRT14 SNP-2;"*
- *"Chiral centers;"*
- *"directing medicine 'upstream' of protein production;" and*
- *"splice-correction"*

Please make corresponding changes to the Prospectus Summary.

Response: In response to the Staff's comment, the Company has revised the disclosure to include a "Glossary of Scientific Terms" on page 97 of the Registration Statement and cross-references to such Glossary on pages 1 and 72 of the Registration Statement.

Proof of Concept of Our Technology, page 74

Efficacy, page 76

8. *We note your statement that the results of your preclinical study "confirm [y]our ability to rationally design PS-modified nucleic acid therapeutics with greater stability, catalytic activity, efficacy and durability." Because approval of the FDA and other comparable regulatory agencies is dependent on such agencies making a determination (according to criteria specified in law and agency regulations) that a drug or biologic is effective, it is premature for you to describe or suggest that any non-approved product is effective. Accordingly, please delete this language throughout your registration statement. In addition, please revise your disclosure as necessary to make clear that any observations you make about your products' potential for efficacy are your own, are not based on the FDA's or any other comparable governmental agency's assessment and do not indicate that your products will achieve favorable results in any later stage trials or that the FDA or comparable agency will ultimately determine that your product is effective for purposes of granting marketing approval.*

Response: In response to the Staff's comment, the Company has revised the disclosure on pages 4, 5, 75 and 78 of the Registration Statement.

Immunogenicity, page 78

9. *Please provide a brief explanation of the term "C3a levels" for a lay investor to understand.*

Response: In response to the Staff's comment, the Company has defined the term "C3a levels" in the "Glossary of Scientific Terms" beginning on page 97 of the Registration Statement.

10. *Please provide a brief discussion of enzyme-linked immunosorbent assay (ELISA) analytical method.*

Response: In response to the Staff's comment, the Company has defined the term "enzyme-linked immunosorbent assay (ELISA) analytical method" in the "Glossary of Scientific Terms" beginning on page 97 of the Registration Statement.

Our Initial Therapeutic Candidates, page 80

11. *Revise this section to clarify which of your candidates will require the Max Planck license in order for you to continue your research and proceed through the approval process.*

Response: In response to the Staff's comment, the Company has revised the disclosure on page 86 of the Registration Statement.

Intellectual Property, page 87

12. *We note your discussion of patents licensed from or co-owned with the University of Tokyo or Shin Nippon Biomedical Laboratories, Ltd. Please provide a discussion of the material terms of such license or co-ownership agreements and file the agreements as exhibits to the registration statement. In the alternative, please provide your analysis for why these patents and the underlying agreements are not material to your business.*

Response: The Company is not currently utilizing the technology claimed in the cases that the Company jointly owns with University of Tokyo or Shin Nippon Biomedical Laboratories, nor does the Company have any plans to utilize or exploit this technology in any way that would be material to its business. References to these matters have been included in the intellectual property section only because they do constitute a portion of the Company's intellectual property portfolio and the Company was seeking merely to provide comprehensive information. Based on the foregoing, the Company respectfully believes that no additional disclosure is necessary nor would it be useful to investors.

Competition, page 88

13. *To the extent known, please disclose the stage of development of competing product candidates.*

Response: In response to the Staff's comment, the Company has revised the disclosure on pages 90 and 91 of the Registration Statement.

General

14. *Please supplementally provide us with copies of all written communications, as defined in Rule 405 under the Securities Act, that you, or anyone authorized to do so on your behalf, present to potential investors in reliance on Section 5(d) of the Securities Act, whether or not they retain copies of the communications.*

Response: In response to the Staff's comment, the Company is providing the slide presentations it has used for the "testing the waters" meetings it has conducted to date, which slide presentations constitute the only written communications, as defined in Rule 405 under the Securities Act, that it, or anyone authorized to do so on its behalf, has presented to potential investors in reliance on Section 5(d) of the Securities Act. The Company further informs the Staff that potential investors have not been permitted to retain copies of the slide presentation.

15. *Please confirm that the images included in your draft registration statement are all of the graphic, visual or photographic information you will be including. If you intend to use any additional images, please provide us proofs of such materials. Please note that we may have comments regarding this material.*

Response: The Company does not currently intend to include any additional graphics other than those graphics included in the Registration Statement. If the Company determines to include any other graphic in the prospectus, prior to its use the Company will promptly provide such material to the Staff on a supplemental basis.

* * * * *

When appropriate, the Company will provide a written request for acceleration of the effective date of the Registration Statement and will include the requested "Tandy" language therein. The Company and the underwriters for the Company's proposed offering are aware of their respective obligations under Rules 460 and 461 regarding requesting acceleration of the effectiveness of the Registration Statement.

We hope that the above responses and the related revisions reflected in the Registration Statement will be acceptable to the Staff. Please do not hesitate to call me at (617) 542-6000 with any comments or questions regarding the Registration Statement and this letter. We thank you for your time and attention.

Sincerely,

/s/ Matthew J. Gardella
Matthew J. Gardella

cc: *Securities and Exchange Commission*
Suzanne Hayes, Assistant Director
Christina De Rosa
Christian Windsor
Lisa Vanjoske
Joel Parker

WAVE Life Sciences Pte. Ltd.
Paul B. Bolno, M.D.

Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.
William C. Hicks

Cooley LLP
Frank F. Rahmani
Nicole Brookshire
John T. McKenna