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

FORM 10-Q

(Mark One)

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended March 31, 2018

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from _____ to _____

Commission File No. 001-37627

WAVE LIFE SCIENCES LTD.

(Exact name of registrant as specified in its charter)

Singapore	**Not applicable**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
7 Straits View #12-00, Marina One East Tower Singapore	**018936**
(Address of principal executive offices)	**(Zip Code)**

+65 6236 3388
(Registrant's telephone number)

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of ''large accelerated filer,'' ''accelerated filer,'' ''smaller reporting company,'' and ''emerging growth company'' in Rule 12b–2 of the Exchange Act.

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

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☒

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The number of outstanding ordinary shares of the registrant as of May 1, 2018 was 29,105,452.

WAVE LIFE SCIENCES LTD.

QUARTERLY REPORT ON FORM 10-Q

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PART I - FINANCIAL INFORMATION

Item 1. Financial Statements

WAVE LIFE SCIENCES LTD.
UNAUDITED CONSOLIDATED BALANCE SHEETS

(In thousands, except share amounts)

	March 31, 2018	December 31, 2017
Assets		
Current assets:		
Cash and cash equivalents	$ 110,491	$ 142,503
Prepaid expenses and other current assets	7,470	7,985
Total current assets	117,961	150,488
Long-term assets:		
Property and equipment, net	28,778	27,334
Restricted cash	3,612	3,610
Other assets	70	411
Total long-term assets	32,460	31,355
Total assets	$ 150,421	$ 181,843
Liabilities, Series A preferred shares and shareholders' equity		
Current liabilities:		
Accounts payable	$ 8,014	$ 7,598
Accrued expenses and other current liabilities	6,461	8,898
Current portion of capital lease obligation	—	16
Current portion of deferred rent	70	60
Current portion of deferred revenue	1,275	1,275
Current portion of lease incentive obligation	478	344
Total current liabilities	16,298	18,191
Long-term liabilities:		
Deferred rent, net of current portion	4,591	4,214
Deferred revenue, net of current portion	5,819	7,241
Lease incentive obligation, net of current portion	4,185	3,094
Other liabilities	1,605	1,619
Total long-term liabilities	16,200	16,168
Total liabilities	$ 32,498	$ 34,359
Series A preferred shares, no par value; 3,901,348 shares issued and outstanding at March 31, 2018 and December 31, 2017	$ 7,874	$ 7,874
Shareholders' equity:		
Ordinary shares, no par value; 27,993,337 and 27,829,079 shares issued and outstanding at March 31, 2018 and December 31, 2017, respectively	$ 311,591	$ 310,038
Additional paid-in capital	26,602	22,172
Accumulated other comprehensive income	165	116
Accumulated deficit	(228,309)	(192,716)
Total shareholders' equity	$ 110,049	$ 139,610
Total liabilities, Series A preferred shares and shareholders' equity	$ 150,421	$ 181,843

The accompanying notes are an integral part of the unaudited consolidated financial statements.

WAVE LIFE SCIENCES LTD.
UNAUDITED CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS

(In thousands, except share and per share amounts)

	Three Months Ended March 31,	
	2018	2017
Revenue	$ 1,422	$ 383
Operating expenses:		
Research and development	29,196	14,740
General and administrative	8,001	5,850
Total operating expenses	37,197	20,590
Loss from operations	(35,775)	(20,207)
Other income (expense), net:		
Dividend income	356	290
Interest income (expense), net	7	3
Other income (expense), net	343	(72)
Total other income (expense), net	706	221
Loss before income taxes	(35,069)	(19,986)
Income tax provision	(172)	(1,110)
Net loss	$ (35,241)	$ (21,096)
Net loss per share attributable to ordinary shareholders—basic and diluted	$ (1.26)	$ (0.90)
Weighted-average ordinary shares used in computing net loss per share attributable to ordinary shareholders—basic and diluted	27,919,063	23,531,788
Other comprehensive income (loss):		
Foreign currency translation	$ 49	$ 15
Comprehensive loss	$ (35,192)	$ (21,081)

The accompanying notes are an integral part of the unaudited consolidated financial statements.

WAVE LIFE SCIENCES LTD.
UNAUDITED CONSOLIDATED STATEMENTS OF CASH FLOWS

(In thousands)

	Three Months Ended March 31,	
	2018	**2017**
Cash flows from operating activities		
Net loss	$ (35,241)	$ (21,096)
Adjustments to reconcile net loss to net cash used in operating activities:		
Amortization of lease incentive obligation	(107)	(17)
Depreciation of property and equipment	1,175	315
Share-based compensation expense	4,430	2,999
Loss on disposal of property and equipment	13	—
Deferred rent	387	1,031
Deferred income taxes	—	(193)
Changes in operating assets and liabilities:		
Prepaid expenses and other current assets	515	(1,813)
Other non-current assets	(11)	—
Accounts payable	390	1,017
Accrued expenses and other current liabilities	(2,541)	(537)
Deferred revenue	(1,422)	(383)
Other non-current liabilities	(14)	1,259
Net cash used in operating activities	(32,426)	(17,418)
Cash flows from investing activities		
Purchases of property and equipment	(1,164)	(3,635)
Net cash used in investing activities	(1,164)	(3,635)
Cash flows from financing activities		
Payments on capital lease obligation	(16)	(16)
Proceeds from the exercise of share options	1,553	206
Net cash provided by financing activities	1,537	190
Effect of foreign exchange rates on cash, cash equivalents and restricted cash	43	57
Net decrease in cash, cash equivalents and restricted cash	(32,010)	(20,806)
Cash, cash equivalents and restricted cash, beginning of period	146,113	153,894
Cash, cash equivalents and restricted cash, end of period	$ 114,103	$ 133,088
Supplemental disclosure of cash flow information:		
Cash paid for taxes, net of refunds	$ 314	$ 18
Property and equipment purchases in accounts payable and accrued expenses at period end	$ 469	$ 2,976
Tenant improvements paid for by the landlord during the period	$ 800	$ 1,082
Tenant improvements to be reimbursed by the landlord	$ 1,279	$ —

The accompanying notes are an integral part of the unaudited consolidated financial statements.

1. THE COMPANY

Organization

Wave Life Sciences Ltd. (together with its subsidiaries, "Wave" or the "Company") is a biotechnology company with an innovative and proprietary synthetic chemistry drug development platform that the Company is using to rationally design, develop and commercialize a broad pipeline of first-in-class or best-in-class nucleic acid therapeutic candidates for genetically defined diseases. Nucleic acid therapeutics are a growing and innovative class of drugs that have the potential to address diseases that have historically been difficult to treat with small molecule drugs or biologics. Nucleic acid therapeutics, or oligonucleotides, are comprised of a sequence of nucleotides that are linked together by a backbone of chemical bonds. The Company is initially developing oligonucleotides 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 U.S. office in Cambridge, 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, Inc. ("Wave Japan"), a company organized under the laws of Japan (formerly Chiralgen., Ltd.), which occurred on September 13, 2012. On May 31, 2016, Wave Life Sciences Ireland Limited ("Wave Ireland") was formed as a wholly-owned subsidiary of Wave Life Sciences Ltd. On April 3, 2017, Wave Life Sciences UK Limited ("Wave UK") was formed as a wholly-owned subsidiary of Wave Life Sciences Ltd.

The Company's primary activities since inception have been developing an innovative and proprietary synthetic chemistry drug development platform to design, develop and commercialize nucleic acid therapeutic programs, advancing the Company's neurology franchise, expanding the Company's research and development activities into additional therapeutic areas including ophthalmology and hepatic, advancing programs into the clinic, furthering clinical development of such clinical-stage programs, building the Company's intellectual property, recruiting personnel and assuring adequate capital to support these activities.

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, establishment of internal manufacturing capabilities, 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 preclinical 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. 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.

The Company has never been profitable, and since its inception has incurred recurring operating losses. The Company expects to incur significant expenses and increasing operating losses for the foreseeable future. To date, the Company has primarily funded its operations through private placements of debt and equity securities, public offerings of its ordinary shares and upfront payments and equity investments related to collaborations with third parties. As of March 31, 2018, the Company has received an aggregate of approximately $323.2 million in net proceeds from these transactions. The Company received $89.3 million in net proceeds from private placements of its debt and equity securities, $100.4 million in net proceeds from its initial public offering, inclusive of the over-allotment exercise, $40.0 million of upfront payments under the Pfizer Agreements (as defined in Note 4), including $10.0 million as an upfront payment under the Pfizer Collaboration Agreement (as defined in Note 4) and $30.0 million in the form of an equity investment, and $93.5 million in net proceeds from its April 2017 follow-on underwritten public offering.

Basis of Presentation

The Company has prepared the accompanying consolidated financial statements in conformity with generally accepted accounting principles in the United States of America ("U.S. GAAP") and in U.S. dollars.

2. SIGNIFICANT ACCOUNTING POLICIES

The significant accounting policies described in the Company's audited financial statements as of and for the year ended December 31, 2017, and the notes thereto, which are included in the Company's Annual Report on Form 10-K for the year ended December 31, 2017, filed with the Securities and Exchange Commission ("SEC") on March 12, 2018, as amended (the "2017 Annual Report on Form 10-K"), have had no material changes during the three months ended March 31, 2018, other than the Company's adoption of ASC 606 (as defined below) which is discussed in detail in this note.

Unaudited Interim Financial Data

The accompanying interim consolidated balance sheet as of March 31, 2018, the related interim consolidated statements of operations and comprehensive loss for the three months ended March 31, 2018 and 2017 and cash flows for the three months ended March 31, 2018 and 2017, 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 SEC 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 three months ended March 31, 2018 and 2017 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 and results of operations for the three months ended March 31, 2018 and 2017. The results of operations for the interim periods are not necessarily indicative of the results to be expected for the year ending December 31, 2018 or any other interim period or future year or period.

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.

Revenue Recognition

Effective January 1, 2018, the Company adopted Accounting Standards Codification ("ASC") Topic 606, Revenue from Contracts with Customers ("ASC 606"), using the full retrospective transition method. Under this method, the Company revised its consolidated financial statements for the years ended December 31, 2017 and 2016, and applicable interim periods within those years, as if ASC 606 had been effective for those periods. This standard applies to all contracts with customers, except for contracts that are within the scope of other standards, such as leases, insurance, and financial instruments. Under ASC 606, an entity recognizes revenue when its customer obtains control of promised goods or services, in an amount that reflects the consideration that the entity expects to receive in exchange for those goods or services. To determine revenue recognition for arrangements that an entity determines are within the scope of ASC 606, the entity performs the following five-step analysis: (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. The Company only applies the five-step analysis to contracts when it is probable that the entity will collect the consideration it is entitled to in exchange for the goods or services it transfers to the customer. At contract inception, once the contract is determined to be within the scope of ASC 606, the Company assesses the goods or services promised within each contract, determines those that are performance obligations, and assesses whether each promised good or service is distinct. The Company then recognizes as revenue the amount of the transaction price that is allocated to the respective performance obligation when (or as) the performance obligation is satisfied.

The Company has entered into collaboration agreements for research, development, and commercial services, under which the Company licenses certain rights to its product candidates to third parties. The terms of these arrangements typically include payment to the Company of one or more of the following: non-refundable, upfront license fees; reimbursement of certain costs; customer option exercise fees; development, regulatory and commercial milestone payments; and royalties on net sales of licensed products. Any variable consideration is constrained, and therefore, the cumulative revenue associated with this consideration is not recognized until it is deemed not to be at significant risk of reversal.

In determining the appropriate amount of revenue to be recognized as the Company fulfills its obligations under each of its agreements for which the collaboration partner is also a customer, the Company performs the following steps: (i) identification of the promised goods or services in the contract; (ii) determination of whether the promised goods or services are performance obligations, including whether they are distinct in the context of the contract; (iii) measurement of the transaction price, including the constraint on variable consideration; (iv) allocation of the transaction price to the performance obligations; and (v) recognition of revenue when (or as) the Company satisfies each performance obligation. As part of the accounting for these arrangements, the Company must use significant judgment to determine: (a) the number of performance obligations based on the determination under step (ii) above; (b) the transaction price under step (iii) above; and (c) the timing of satisfaction of performance obligations as a measure of progress in step (v) above. The Company uses significant judgment to determine whether milestones or other variable consideration, except for royalties, should

be included in the transaction price as described further below. The transaction price is allocated to the optional goods and services the Company expects to provide. The Company uses estimates to determine the timing of satisfaction of performance obligations, which may include the use of the full time employee ("FTE") hours as a measure of satisfaction of performance obligations.

Amounts received prior to revenue recognition are recorded as deferred revenue. Amounts expected to be recognized as revenue within the 12 months following the balance sheet date are classified as current portion of deferred revenue in the accompanying consolidated balance sheets. Amounts not expected to be recognized as revenue within the 12 months following the balance sheet date are classified as deferred revenue, net of current portion.

Licenses of intellectual property: In assessing whether a promise or performance obligation is distinct from the other promises, the Company considers factors such as the research, development, manufacturing and commercialization capabilities of the customer and the availability of the associated expertise in the general marketplace. In addition, the Company considers whether the customer can benefit from a promise for its intended purpose without the receipt of the remaining promise, whether the value of the promise is dependent on the unsatisfied promise, whether there are other vendors that could provide the remaining promise, and whether it is separately identifiable from the remaining promise. For licenses that are combined with other promises, the Company utilizes judgment to assess the nature of the combined performance obligation to determine whether the combined performance obligation is satisfied over time or at a point in time and, if over time, the appropriate method of measuring progress for purposes of recognizing revenue. The Company evaluates the measure of progress each reporting period and, if necessary, adjusts the measure of performance and related revenue recognition.

Research and development services: If an arrangement is determined to contain a promise or obligation for the company to perform research and development services, the Company must determine whether these services are distinct from other promises in the arrangement. In assessing whether the services are distinct from the other promises, the Company considers the capabilities of the customer to perform these same services. In addition, the Company considers whether the customer can benefit from a promise for its intended purpose without the receipt of the remaining promise, whether the value of the promise is dependent on the unsatisfied promise, whether there are other vendors that could provide the remaining promise, and whether it is separately identifiable from the remaining promise. For research and development services that are combined with other promises, the Company utilizes judgment to assess the nature of the combined performance obligation to determine whether the combined performance obligation is satisfied over time or at a point in time and, if over time, the appropriate method of measuring progress for purposes of recognizing revenue. The Company evaluates the measure of progress each reporting period and, if necessary, adjusts the measure of performance and related revenue recognition.

Customer options: If an arrangement is determined to contain customer options that allow the customer to acquire additional goods or services, the goods and services underlying the customer options are not considered to be performance obligations at the outset of the arrangement, as they are contingent upon option exercise. The Company evaluates the customer options for material rights, that is, the option to acquire additional goods or services for free or at a discount. If the customer options are determined to represent a material right, the material right is recognized as a separate performance obligation at the outset of the arrangement. The Company allocates the transaction price to material rights using the practical alternative approach. The Company uses the practical alternative approach when the goods or services are both (i) similar to the original goods and services in the contract and (ii) provided in accordance with the terms of the original contract. Under this alternative, the Company allocates the total amount of consideration expected to be received from the customer to the total goods or services expected to be provided to the customer. Amounts allocated to a material right are not recognized as revenue until the option is exercised and the performance obligation is satisfied.

Milestone payments: At the inception of each arrangement that includes milestone payments, the Company evaluates whether a significant reversal of cumulative revenue provided in conjunction with achieving the milestones is probable, and estimates the amount to be included in the transaction price using the most likely amount method. If it is probable that a significant reversal of cumulative revenue would not occur, the associated milestone value is included in the transaction price. Milestone payments that are not within the control of the Company or the licensee, such as regulatory approvals, are not considered probable of being achieved until those approvals are received. For other milestones, the Company evaluates factors such as the scientific, clinical, regulatory, commercial, and other risks that must be overcome to achieve the particular milestone in making this assessment. There is considerable judgment involved in determining whether it is probable that a significant reversal of cumulative revenue would not occur. At the end of each subsequent reporting period, the Company reevaluates the probability of achievement of all milestones subject to constraint and, if necessary, adjusts its estimate of the overall transaction price. Any such adjustments are recorded on a cumulative catch-up basis, which would affect revenues and earnings in the period of adjustment.

Royalties: For arrangements that include sales-based royalties, including milestone payments based on a level of sales, and the license is deemed to be the predominant item to which the royalties relate, the Company recognizes revenue at the later of (i) when the related sales occur, or (ii) when the performance obligation to which some or all of the royalty has been allocated has been satisfied (or partially satisfied). To date, the Company has not recognized any royalty revenue resulting from any of its licensing arrangements.

Contract costs: The Company recognizes as an asset the incremental costs of obtaining a contract with a customer if the costs are expected to be recovered. As a practical expedient, the Company recognizes the incremental costs of obtaining a contract as an expense when incurred if the amortization period of the asset that we otherwise would have recognized is one year or less. To date, the Company has not incurred any incremental costs of obtaining a contract with a customer.

For additional discussion of accounting for collaboration revenues, see Note 4, “Pfizer Collaboration and Equity Agreements.”

Recently Issued Accounting Pronouncements

The recently issued accounting pronouncements described in the Company’s audited financial statements as of and for the year ended December 31, 2017, and the notes thereto, which are included in the 2017 Annual Report on Form 10-K, have had no material changes during the three months ended March 31, 2018, except as described below.

In February 2018, the Financial Accounting Standards Board (the “FASB”) issued Accounting Standards Update (“ASU”) No. 2018-02, Income Statement—Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income (“ASU 2018-02”), which allows companies to make a one-time reclassification of the stranded tax effects (as defined by ASU 2018-02) from accumulated other comprehensive income to retained earnings as a result of the tax legislation enacted in December 2017, commonly known as the “Tax Cuts and Jobs Act” (the “Tax Act”), and requires certain disclosures about the stranded tax effects. The new guidance is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. The Company is currently evaluating the potential impact that the adoption of ASU 2018-02 may have on its consolidated financial statements.

In March 2018, the FASB issued Accounting Standards Update No. 2018-05, Income Taxes (Topic 740): Amendments to SEC Paragraphs Pursuant to SEC Staff Accounting Bulletin No. 118 (“ASU 2018-05”). The standard amends Accounting Standards Codification 740, Income Taxes (“ASC 740”), to provide guidance on accounting for the tax effects of the Tax Act pursuant to Staff Accounting Bulletin No. 118. The Company is currently evaluating the new guidance included in ASU 2018-05, but does not expect it to have a material impact on its consolidated financial statements.

Recently Adopted Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) No. 2014-09, which amends the guidance for accounting for revenue from contracts with customers. This ASU supersedes the revenue recognition requirements in ASC Topic 605, Revenue Recognition, (“ASC 605”), and creates a new topic, ASC 606, Revenue from Contracts with Customers. In 2015 and 2016, the FASB issued additional ASUs related to ASC 606 that delayed the effective date of the guidance and clarified various aspects of the new revenue guidance, including principal versus agent considerations, identifying performance obligations, and licensing, and they include other improvements and practical expedients. The Company adopted this new standard on January 1, 2018 using the full retrospective transition method.

Impact of Adoption

As a result of adopting ASC 606 on January 1, 2018, the Company has revised its comparative financial statements for the prior year as if ASC 606 had been effective for that period. As a result, the following financial statement line items for fiscal year 2017 were affected.

Condensed Consolidated Balance Sheets

	As of December 31, 2017		
	As revised under ASC 606	**As originally reported under ASC 605**	**Effect of change**
	(in thousands)		
Current portion of deferred revenue	$ 1,275	$ 2,705	$ (1,430)
Deferred revenue, net of current portion	7,241	5,607	1,634
Accumulated deficit	(192,716)	(192,512)	(204)

Condensed Consolidated Statements of Operations and Comprehensive Loss

	Three Months Ended March 31, 2017		
	As revised under ASC 606	As originally reported under ASC 605	Effect of change
	(in thousands, except per share data)		
Revenue	$ 383	$ 676	$ (293)
Loss from operations	(20,207)	(19,914)	(293)
Income tax provision	(1,110)	(1,303)	193
Net loss	(21,096)	(20,996)	(100)
Net loss per share attributable to ordinary shareholders—basic and diluted	$ (0.90)	$ (0.89)	$ (0.01)

Condensed Consolidated Statement of Cash Flows

	Three Months Ended March 31, 2017		
	As revised under ASC 606	As originally reported under ASC 605	Effect of change
	(in thousands)		
Net loss	$ (21,096)	$ (20,996)	$ (100)
Adjustments to reconcile net loss to net cash used in operating activities:			
Deferred income taxes	(193)	—	(193)
Changes in operating assets and liabilities:			
Deferred revenue	(383)	(676)	293
Net cash used in operating activities	(17,418)	(17,418)	—
Cash, cash equivalents and restricted cash, beginning of period	153,894	153,894	—
Cash, cash equivalents and restricted cash, end of period	133,088	133,088	—

The most significant changes relate to the Company's revenue recognition pattern for the Pfizer Collaboration Agreement and the accounting for milestone payments.

Under ASC 605, the Company was recognizing the revenue allocated to each unit of accounting on a straight-line basis over the period the Company is expected to complete its obligations. Under ASC 606, the Company is recognizing the revenue allocated to each performance obligation measuring progress using an input method over the period the Company is expected to complete each performance obligation.

Under ASC 605, the Company recognized revenue related to milestone payments as the milestone was achieved, using the milestone method. Under ASC 606, the Company performs an assessment of the probability of milestone achievement at each reporting date, and determines whether the cumulative revenue related to the milestone is at risk of significant reversal. For further discussion of the adoption of this standard, see Note 4, "Pfizer Collaboration and Equity Agreements."

In October 2016, the FASB issued Accounting Standards Update No. 2016-16, Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory ("ASU 2016-16"). Under the new guidance, companies are required to recognize the income tax consequences of an intra-entity transfer of an asset, other than inventory, when the transfer occurs, even though the pre-tax effects of that transaction are eliminated in consolidation. The amendments are effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2017. These amendments should be applied on a modified retrospective basis through a cumulative-effect adjustment directly to retained earnings at the beginning of the period adopted. The Company adopted ASU 2016-16 effective January 1, 2018, which resulted in a $0.4 million cumulative-effect adjustment to retained earnings related to the intercompany sale of intellectual property on October 1, 2017.

In November 2016, the FASB issued Accounting Standards Update No. 2016-18, Statement of Cash Flows (Topic 230): Restricted Cash ("ASU 2016-18"). ASU 2016-18 requires that an entity explain the changes in the total of cash, cash equivalents, restricted cash and restricted cash equivalents on the statement of cash flows. Therefore, amounts generally described as restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. This ASU is effective for annual and interim periods beginning after December 15, 2017, and is required to be adopted using a retrospective approach, with early adoption permitted. The Company adopted ASU 2016-18 effective January 1, 2018 on a retrospective basis which resulted in a change in presentation of restricted cash within the Company's unaudited consolidated statements of cash flows.

3. SHARE-BASED COMPENSATION

The Wave Life Sciences Ltd. 2014 Equity Incentive Plan (the "2014 Plan") authorizes the board of directors or a committee of the board of directors to grant incentive share options, non-qualified share options, share appreciation rights, restricted awards, which includes restricted shares and restricted share units ("RSUs"), and performance awards to eligible employees, consultants and directors of the Company. Options generally vest over periods of one to four years, and any options that are forfeited or cancelled are available to be granted again. The contractual life of options is generally five or ten years from the grant date. RSUs generally vest over a period of one or four years, and any RSUs that are forfeited are available to be granted again.

During the three months ended March 31, 2018, 451,520 options and 309,247 RSUs were granted to employees of the Company.

As of March 31, 2018, 975,301 ordinary shares remained available for future grant under the 2014 Plan.

4. PFIZER COLLABORATION AND EQUITY AGREEMENTS

In May 2016, the Company entered into a Research, License and Option Agreement, as amended (the "Pfizer Collaboration Agreement"), with Pfizer Inc. ("Pfizer"). Pursuant to the terms of the Pfizer Collaboration Agreement, the Company and Pfizer agreed to collaborate on the discovery, development and commercialization of stereopure oligonucleotide therapeutics for up to five programs (the "Pfizer Programs"), each directed at a genetically-defined hepatic target selected by Pfizer (the "Pfizer Collaboration"). The Company received $10.0 million as an upfront license fee under the Pfizer Collaboration Agreement. Subject to option exercises by Pfizer, the Company may earn potential research, development and commercial milestone payments, plus royalties, tiered up to low double-digits, on sales of any products that may result from the Pfizer Collaboration. None of the payments under the Pfizer Collaboration Agreement are refundable.

Simultaneously with the entry into the Pfizer Collaboration Agreement, the Company entered into a Share Purchase Agreement (the "Pfizer Equity Agreement," and together with the Pfizer Collaboration Agreement, the "Pfizer Agreements") with C.P. Pharmaceuticals International C.V., an affiliate of Pfizer (the "Pfizer Affiliate"). Pursuant to the terms of the Pfizer Equity Agreement, the Pfizer Affiliate purchased 1,875,000 of the Company's ordinary shares (the "Shares") at a purchase price of $16.00 per share, for an aggregate purchase price of $30.0 million. The Company did not incur any material costs in connection with the issuance of the Shares.

Under the Pfizer Collaboration Agreement, the parties agreed to collaborate during a four-year research term. During the research term, the Company is responsible to use its commercially reasonable efforts to advance up to five programs through to the selection of clinical candidates. At that stage, Pfizer may elect to license any of these Pfizer Programs exclusively and obtain exclusive rights to undertake the clinical development of the resulting clinical candidates into products and the potential commercialization of any such products thereafter. In addition, the Company received a non-exclusive, royalty-bearing sublicensable license to use Pfizer's hepatic targeting technology in any of the Company's own hepatic programs that are outside the scope of the Pfizer Collaboration (the "Wave Programs"). If the Company uses this technology on the Wave Programs, Pfizer is eligible to receive potential development and commercial milestone payments from the Company. Pfizer is also eligible to receive tiered royalties on sales of any products that include Pfizer's hepatic targeting technology.

Pfizer nominated two hepatic targets upon entry into the Pfizer Collaboration in May 2016. The Pfizer Collaboration Agreement provides Pfizer with options to nominate up to three additional programs by making nomination milestone payments. Pfizer nominated the third, fourth and fifth hepatic targets in August 2016, March 2018 and April 2018, respectively.

The Pfizer Collaboration is managed by a joint steering committee in which both parties are represented equally, which will oversee the scientific progression of each Pfizer Program up to the clinical candidate stage. During the four-year research term and for a period of two years thereafter, the Company has agreed to work exclusively with Pfizer with respect to using any of the Company's stereopure oligonucleotide technology that is specific for the applicable hepatic target which is the basis of any Pfizer Program. Within 120 days of receiving a data package for a candidate under each nominated program, Pfizer may exercise an option to obtain a license to develop, manufacture and commercialize the program candidate by paying an exercise price per program.

The Company assessed this arrangement in accordance with ASC 606 and concluded that the contract counterparty, Pfizer, is a customer. The Company identified the following promises under the arrangement: (1) the non-exclusive, royalty-free research and development license; (2) the research and development services for Programs 1 and 2; (3) the program nomination options for Programs 3, 4 and 5; (4) the research and development services associated with Programs 3, 4 and 5; (5) the options to obtain a license to develop, manufacture and commercialize Programs 1 and 2; and (6) the options to obtain a license to develop, manufacture and commercialize Programs 3, 4 and 5. The research and development services for each of Programs 1 and 2 were determined to not be distinct from the research and development license and should be combined into a single performance obligation for each program.

The promises under the Pfizer Collaboration Agreement relate primarily to the research and development required by the Company for each of the programs nominated by Pfizer.

Additionally, the Company determined that the program nomination options for Programs 3, 4 and 5 were priced at a discount, and as such provide material rights to Pfizer, representing three separate performance obligations. The research and development services associated with Programs 3, 4 and 5 and the options to obtain a license to develop, manufacture and commercialize Programs 3, 4 and 5 are subject to Pfizer's exercise of the program nomination options for such programs and therefore do not represent performance obligations at the outset of the arrangement. The options to obtain a license to develop, manufacture and commercialize Programs 1 and 2 do not represent material rights; as such, they are not representative of performance obligations at the outset of the arrangement. Based on these assessments, the Company identified five performance obligations in the Pfizer Collaboration Agreement: (1) research and development services and license for Program 1; (2) research and development services and license for Program 2; (3) material right provided for the option to nominate Program 3; (4) material right provided for the option to nominate Program 4; and (5) material right provided for the option to nominate Program 5.

At the outset of the arrangement, the transaction price included only the $10.0 million up-front consideration received. The Company analyzed this up-front consideration and determined that the Pfizer Collaboration Agreement did not contain a significant financing component. The program nomination option exercise fees for research and development services associated with Programs 3, 4 and 5 that may be received are excluded from the transaction price until each customer option is exercised. The potential milestone payments were excluded from the transaction price, as all milestone amounts were fully constrained at the inception of the Pfizer Collaboration Agreement. The exercise fees for the options to obtain a license to develop, manufacture and commercialize Programs 3, 4 and 5 that may be received are excluded from the transaction price until each customer option is exercised. The Company will reevaluate the transaction price at the end of each reporting period and as uncertain events are resolved or other changes in circumstances occur, and, if necessary, will adjust its estimate of the transaction price.

During the three months ended September 30, 2017, it became probable that a significant reversal of cumulative revenue would not occur for a developmental milestone under the Pfizer Collaboration Agreement. At such time, the associated consideration was added to the estimated transaction price and allocated to the existing performance obligations, and the Company recognized a cumulative catch-up to revenue for this developmental milestone, representing the amount that would have been recognized had the milestone payment been included in the transaction price from the outset of the arrangement. The remainder will be recognized in the same manner as the remaining, unrecognized transaction price over the remaining period until each performance obligation is satisfied. The milestone was achieved in November 2017.

Revenue associated with the performance obligations relating to Programs 1 and 2 is being recognized as revenue as the research and development services are provided using an input method, according to the full-time employee ("FTE") hours incurred on each program and the FTE hours expected to be incurred in the future to satisfy the performance obligation. The transfer of control occurs over time and, in management's judgment, is the best measure of progress towards satisfying the performance obligation. The amount allocated to the three material rights will be recognized as the underlying research and development services are provided commencing from the date that Pfizer exercises each respective option, or immediately as each option expires unexercised. The amounts received that have not yet been recognized as revenue are recorded in deferred revenue on the Company's consolidated balance sheet.

In August 2016, Pfizer exercised its option to nominate Program 3. The Company allocated the transaction price amount allocated to the material right at inception of the arrangement plus the program nomination option exercise fee paid by Pfizer at the time of exercising the option) to a new performance obligation, which will be recognized as revenue as the research and development services are provided using the same method as the performance obligations relating to Programs 1 and 2.

The stated term of the Pfizer Collaboration Agreement commenced on May 5, 2016 and terminates on the date of the last to expire payment obligation with respect to each Pfizer Program and with respect to each Wave Program, expires on a program-by-program basis accordingly. Pfizer may terminate its rights related to a Pfizer Program under the Pfizer Collaboration Agreement at its own convenience upon 90 days' notice to the Company. The Company may also terminate its rights related to a Wave Program at its own convenience upon 90 days' notice to Pfizer. The Pfizer Collaboration Agreement may also be terminated by either party in the event of an uncured material breach of the Pfizer Collaboration Agreement by the other party.

Through March 31, 2018, the Company had recognized revenue of $6.4 million as collaboration revenue in the Company's consolidated statements of operations and comprehensive loss under the Pfizer Collaboration Agreement. The $1.4 million of revenue recognized during the quarter ended March 31, 2018 was included in deferred revenue as of December 31, 2017. The aggregate amount of the transaction price allocated to the Company's unsatisfied and partially unsatisfied performance obligations and recorded in deferred revenue at March 31, 2018 is $7.1 million, of which $1.3 million is included in current liabilities. The Company expects to recognize this amount according to FTE hours incurred, over the remaining research term, which is 25 months as of March 2018.

5. NET LOSS PER ORDINARY SHARE

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.

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.

The Company's potentially dilutive shares, which include outstanding share options to purchase ordinary shares, RSUs and Series A preferred 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 ordinary share equivalents, 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:

	As of March 31,	
	2018	2017
Options to purchase ordinary shares	4,077,623	3,776,572
RSUs	420,517	191,657
Series A preferred shares	3,901,348	3,901,348

6. INCOME TAXES

The Company is a Singapore multi-national company subject to taxation in the United States and various other jurisdictions. During the three months ended March 31, 2018 and 2017, the Company recorded an income tax provision of $0.2 million and $1.1 million, respectively. The income tax provision recorded during the three months ended March 31, 2018 was due to provision to return adjustments related to the filing of Wave Japan's 2017 tax return. The income tax provision recorded during the three months ended March 31, 2017 was primarily the result of U.S. income generated under research and management services arrangements between one of the Company's subsidiaries, Wave USA, and the Company's Singapore parent company.

During the three months ended March 31, 2018, the Company recorded no income tax benefits for the net operating losses incurred in Singapore, the United States, Japan, the United Kingdom or Ireland, due to its uncertainty of realizing a benefit from those items. During the three months ended March 31, 2017, the Company recorded no income tax benefits for the net operating losses incurred in Singapore, Japan or Ireland, due to its uncertainty of realizing a benefit from those items.

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.

7. 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 held cash of $0.1 million in depository accounts with Kagoshima Bank, Ltd., an affiliate of one of the Company's shareholders, Kagoshima Shinsangyo Sousei Investment Limited Partnership, as of December 31, 2017. These depository accounts were closed during the three months ended March 31, 2018.
- Pursuant to the terms of various service agreements with Shin Nippon Biomedical Laboratories Ltd., one of the Company's shareholders, and its affiliates (together "SNBL"), the Company paid SNBL $0.8 million and less than $0.1 million during the three months ended March 31, 2018 and 2017, respectively, for contract research services provided to the Company and its affiliates.
- In 2012, the Company entered into a consulting agreement for scientific advisory services with Dr. Gregory L. Verdine, one of the Company's founders and a member of the Company's board of directors. The consulting agreement does not have a specific term and may be terminated by either party upon 14 days' prior written notice. Pursuant to the consulting agreement, the Company pays Dr. Verdine approximately $13 thousand per month, plus reimbursement of certain expenses.

8. SUBSEQUENT EVENTS

Takeda Collaboration and Equity Investment

In February 2018, Wave USA and Wave UK entered into a global strategic collaboration with Takeda (the "Takeda Collaboration"), pursuant to which Wave USA, Wave UK and Takeda agreed to collaborate on the research, development and commercialization of oligonucleotide therapeutics for disorders of the CNS. The Takeda Collaboration provides Wave with at least $230.0 million in committed cash and Takeda with the option to co-develop and co-commercialize our CNS development programs in HD, ALS and FTD, as well as our discovery-stage program targeting ATXN3 for the treatment of SCA3. In addition, Takeda will have the right to exclusively license multiple preclinical programs for CNS disorders, including Alzheimer's disease and Parkinson's disease. In April 2018, the Takeda Collaboration became effective and Takeda paid us $110.0 million as an upfront payment. Takeda also agreed to fund our research and preclinical activities in the amount of $60.0 million during the four-year research term and to reimburse us for any collaboration-budgeted research and preclinical expenses incurred by us that exceed that amount.

Simultaneously with our entry into the collaboration and license agreement with Takeda (the "Takeda Collaboration Agreement"), we entered into a share purchase agreement with Takeda pursuant to which we agreed to sell to Takeda 1,096,892 of our ordinary shares at a purchase price of $54.70 per share (the "Takeda Equity Investment"). In April 2018, we closed the Takeda Equity Investment and received aggregate cash proceeds of $60.0 million.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our financial statements and related notes appearing elsewhere in this Quarterly Report on Form 10-Q and in our Annual Report on Form 10-K for the year ended December 31, 2017, filed with the Securities and Exchange Commission ("SEC") on March 12, 2018, as amended (the "2017 Annual Report on Form 10-K"). Some of the information contained in this discussion and analysis or set forth elsewhere in this Quarterly Report on Form 10-Q, including information with respect to our plans and strategy for our business, includes forward-looking statements that involve risks and uncertainties. As a result of many factors, including those factors set forth in the "Risk Factors" section of this Quarterly Report on Form 10-Q, our actual results could differ materially from the results described in, or implied by, these forward-looking statements.

As used in this Quarterly Report on Form 10-Q, unless otherwise stated or the context otherwise indicates, references to "Wave," the "Company," "we," "our," "us" or similar terms refer to Wave Life Sciences Ltd. and our wholly-owned subsidiaries.

Special Note Regarding Forward-Looking Statements

This Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, that relate to future events or to our future operations or financial performance. Any forward-looking statement involves known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to differ materially from any future results, levels of activity, performance or achievements expressed or implied by such forward-looking statement. In some cases, forward-looking statements are identified by the words "anticipate," "believe," "continue," "could," "estimate," "expect," "future," "goals," "intend," "likely," "may," "might," "ongoing," "objective," "plan," "potential," "predict," "project," "seek," "should," "strategy," "target," "will" and "would" or the negative of these terms, or other comparable terminology intended to identify statements about the future, although not all forward-looking statements contain these identifying words. Forward-looking statements include statements, other than statements of historical fact, about, among other things: our ability to fund our working capital requirements; the success, progress, scope, cost, duration and timing of our research and development activities, preclinical studies and clinical trials; the timing of, and our ability to, obtain and maintain regulatory approvals for any of our product candidates; the success of our collaborations with third parties; our ability to identify and develop new product candidates; our intellectual property position; our commercialization, marketing and manufacturing capabilities and strategy; 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; developments and projections relating to our competitors in the industry; our liquidity and working capital requirements; and the expected impact of new accounting standards.

Although we believe that we have a reasonable basis for each forward-looking statement contained in this report, we caution you that these statements are based on our estimates or projections of the future that are subject to known and unknown risks and uncertainties and other important factors that may cause our actual results, level of activity, performance or achievements expressed or implied by any forward-looking statement to differ. These risks, uncertainties and other factors include, among other things, our critical accounting policies and: the ability of our preclinical studies to produce data sufficient to support the filing of global clinical trial applications and the timing thereof; our ability to continue to build and maintain the company infrastructure and personnel needed to achieve our goals; the clinical results of our programs, which may not support further development of our product candidates; actions of regulatory agencies, which may affect the initiation, timing and progress of clinical trials; our effectiveness in managing current and future clinical trials and regulatory processes; the success of our platform in identifying viable candidates; the continued development and acceptance of nucleic acid therapeutics as a class of drugs; our ability to demonstrate the therapeutic benefits of our stereopure candidates in clinical trials, including our ability to develop candidates across multiple therapeutic modalities; our ability to obtain, maintain and protect intellectual property; our ability to enforce our patents against infringers and defend our patent portfolio against challenges from third parties; our ability to fund our operations and to raise additional capital as needed; and competition from others developing therapies for similar uses, as well as the information under the caption "Risk Factors" contained in this Quarterly Report on Form 10-Q and in other filings we make with the SEC.

Although we believe that we have a reasonable basis for each forward-looking statement contained in this Quarterly Report on Form 10-Q, such 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. As a result of these factors, we cannot assure you that the forward-looking statements in this Quarterly Report on Form 10-Q 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, these statements should not be regarded as representations or warranties by us or any other person that we will achieve our objectives and plans in any specified timeframe, or at all. We caution you not to place undue reliance on any forward-looking statement.

In addition, any forward-looking statement in this Quarterly Report on Form 10-Q represents our views only as of the date of this report and should not be relied upon as representing our views as of any subsequent date. We anticipate that subsequent events and developments may cause our views to change. Although we may elect to update these forward-looking statements publicly at some

point in the future, 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 applicable law. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments we may make.

Overview

We are a biotechnology company with an innovative and proprietary synthetic chemistry drug development platform that we are using to rationally design, develop and commercialize a broad pipeline of first-in-class or best-in-class nucleic acid therapeutic candidates for genetically defined diseases. Nucleic acid therapeutics are a growing and innovative class of drugs that have the potential to address diseases that have historically been difficult to treat with small molecule drugs or biologics. Nucleic acid therapeutics, or oligonucleotides, are comprised of a sequence of nucleotides that are linked together by a backbone of chemical bonds. We are initially developing oligonucleotides 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 nucleic acid therapeutics we are developing are stereopure. A stereopure oligonucleotide is comprised of molecules with atoms precisely arranged in three-dimensional orientations at each linkage. We believe that controlling the position of the sulfur atom following phosphorothioate ("PS") modification will optimize the pharmacological profile of our therapeutics by maximizing therapeutic effect while minimizing the potential for side effects and safety risks. The stereopure therapies we are developing differ from the mixture-based nucleic acid therapeutics currently on the market or in development by others. Our preclinical studies have demonstrated that our stereopure nucleic acid therapeutics may achieve superior pharmacological properties compared with mixture-based nucleic acid therapeutics. Our platform is designed to enable us to rationally design, optimize and produce stereopure nucleic acid therapeutics, which were previously thought to be too difficult to make and too expensive to manufacture. Further, our platform has the potential to design therapies that use any of the major molecular mechanisms employed by nucleic acid therapeutics, including antisense, ribonucleic acid interference ("RNAi"), splicing and exon skipping.

Our goal is to develop and commercialize disease-modifying drugs for indications with a high degree of unmet medical need in genetically defined diseases, and to become a fully integrated biotechnology company. We are 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 initial focus for our clinical development programs is in neurology, which we broadly define as genetic diseases within the central nervous system and neuromuscular system. We have initiated clinical trials of our two lead programs in Huntington's disease and our lead program in Duchenne muscular dystrophy ("DMD") targeting exon 51. We expect to initiate three additional development programs, targeting exon 53 in DMD and *C9ORF72* in amyotrophic lateral sclerosis and frontotemporal dementia during 2018. In addition to neurology, we continue to advance discovery research in ophthalmologic and hepatic diseases and expect to make continued investments in expanding the breadth of our portfolio. In further support of our pipeline, we continue to make substantial investments in, and leverage, our platform to explore the next generation of stereopure nucleic acid therapeutics that have the potential to selectively target certain cell types. We have also established and continue to enhance our internal cGMP manufacturing capabilities to increase control and visibility of our drug product supply chain. These investments further improve our ability to secure drug product for current and future development activities and may provide commercial-scale manufacturing capabilities.

Our Current Programs

CNS	TARGET	BIOMARKER	MECHANISM	DISCOVERY	CANDIDATE	CLINICAL	TRIAL PHASE	WAVE'S COMMERCIAL RIGHTS	PARTNER
Huntington's disease	mHTT SNP1	mHTT	A	●	●	●	Phase 1b/2a	50% Global	Takeda
Huntington's disease	mHTT SNP2	mHTT	A	●	●	●	Phase 1b/2a	50% Global	Takeda
Amyotrophic lateral sclerosis	C9orf72	Dipeptide	A	●	●	○		50% Global	Takeda
Frontotemporal dementia	C9orf72	Dipeptide	A	●	●	○		50% Global	Takeda
Spinocerebellar ataxia 3	ATXN3		S	●	○	○		50% Global	Takeda
CNS diseases	Multiple[†]		○	●	○	○		Milestones & Royalties	Takeda
MUSCLE									
Duchenne muscular dystrophy	Exon 51	Dystrophin	E	●	●	●	Phase 1	100% Global	—
Duchenne muscular dystrophy	Exon 53	Dystrophin	E	●	○	○		100% Global	—
Neuromuscular diseases	Multiple		○	●	○	○		100% Global	—
OPHTHALMOLOGY									
Retinal diseases	Multiple		○	●	○	○		100% Global	—
HEPATIC									
Metabolic liver diseases	APOC3	Triglyceride	S	●	○	○		Milestones & Royalties	Pfizer
Metabolic liver diseases	Multiple (4)[‡]		○	●	○	○		Milestones & Royalties	Pfizer

S = silencing. A = allele-specific silencing. E = exon skipping.

[†] During a four-year term, Wave and Takeda may collaborate on up to six preclinical targets at any one time.
[‡] Pfizer has nominated four undisclosed targets in addition to APOC3.

Additional details regarding our programs are set forth below.

Neurology: Central Nervous System ("CNS")

- In Huntington's disease ("HD"), we are advancing two programs, WVE-120101 and WVE-120102, each targeting a disease-associated single nucleotide polymorphism ("SNP") within the *huntingtin* gene ("*HTT*"): rs362307 ("HTT SNP1") and rs362331 ("HTT SNP2"), respectively, which allows us to target the mutant allele, leaving the healthy allele relatively intact. We commonly refer to this method (or approach) as "allele specific targeting." SNPs are naturally occurring variations within a given genetic sequence and in certain instances can be used to distinguish between two related copies of a gene where only one is associated with the expression of a disease-causing protein. We have shown that by targeting HTT SNP1 and HTT SNP2 in preclinical models, the production of disease-causing proteins associated with HD can be reduced. In July 2017, we initiated PRECISION-HD1 and PRECISION-HD2, global Phase 1b/2a clinical trials for WVE-120101 and WVE-120102, respectively. We expect top-line data from these trials in the first half of 2019.
- In amyotrophic lateral sclerosis ("ALS") and frontotemporal dementia ("FTD"), we are advancing WVE-3972-01, which preferentially targets the transcript containing the GGGGCC ("G4C2") expansion in the *C9ORF72* gene. WVE-3972-01 is designed to minimize the impact on normal C9ORF72 protein levels in patients, thereby reducing potential on-target risk. The G4C2 expansion in the *C9ORF72* gene is the most common cause of familial ALS and FTD and is a strong genetic risk factor for non-inherited (sporadic) forms of ALS and FTD. We expect to initiate clinical trials of WVE-3972-01 in ALS and FTD in the fourth quarter of 2018.
- Spinocerebellar ataxia 3 ("SCA3") is a rare, hereditary (autosomal dominant), progressive, neurodegenerative disorder that is caused by a CAG-repeat expansion in the *ATXN3* gene. We expect to have a SCA3 candidate targeting *ATXN3* identified by the end of 2018.
- We are collaborating with Takeda Pharmaceutical Company Limited ("Takeda") to advance genetically defined targets for the treatment of other CNS disorders, including Alzheimer's disease and Parkinson's disease. Under the terms of the agreement, we may collaborate with Takeda on up to six preclinical programs at any one time, during a four-year term. Takeda is entitled to exclusively license multiple preclinical programs from us during the term.

Neurology: Muscle

- In Duchenne muscular dystrophy ("DMD"), we are advancing WVE-210201, which targets exon 51, a region within the precursor messenger RNA ("pre-mRNA") that is transcribed from the *dystrophin* gene (also referred to as the "*DMD*" gene). DMD is a genetic disorder caused by mutations in the *DMD* gene that results in dysfunctional dystrophin protein. In November 2017, we initiated a global Phase 1 clinical trial of WVE-210201 administered intravenously. Safety data from the Phase 1 clinical trial are anticipated in the third quarter of 2018.
- Our second development program in DMD targets exon 53, and we expect to initiate clinical trials for this program in the first quarter of 2019.
- Also in DMD, we are exploring programs targeting other *DMD* exons and investigating alternative forms of delivery, including subcutaneous administration, for our existing and future DMD programs.
- Outside of DMD, we are conducting research to identify potential targets for other neuromuscular diseases where our novel platform technology, candidate discovery and rational design process may be most effective.

Ophthalmology

- In genetic ophthalmologic diseases, we have conducted preclinical research into the development of stereopure compounds and tested the hypothesis that controlling the chirality of PS linkages in the backbones of oligonucleotides will provide benefits in potency, distribution and duration of effect in the eye. In these studies, we have employed *MALAT1* as a surrogate target. We have evaluated lead stereopure oligonucleotides *in vivo* following single intravitreal injection in mouse and non-human primate eyes.

Hepatic

- We are collaborating with Pfizer to advance genetically defined targets for the treatment of metabolic diseases, bringing together our proprietary drug development platform across antisense and single-stranded RNAi modalities, along with GalNAc and Pfizer's hepatic targeting technology for delivery to the liver. Pfizer has selected five targets, the maximum under the terms of the agreement. We will advance five targets from discovery through the selection of clinical candidates, at which point Pfizer may elect to exclusively license the programs and undertake further development and potential commercialization. Two of the targets were declared upon initiation of the agreement, including Apolipoprotein C-III (APOC3). Pfizer nominated the third, fourth and fifth hepatic targets in August 2016, March 2018 and April 2018, respectively.

Recent Developments

In February 2018, we entered into a global strategic collaboration (the "Takeda Collaboration"), pursuant to which we and Takeda agreed to collaborate on the research, development and commercialization of oligonucleotide therapeutics for disorders of the CNS. The Takeda Collaboration provides Wave with at least $230.0 million in committed cash and Takeda with the option to co-develop and co-commercialize our CNS development programs in HD, ALS and FTD, as well as our discovery-stage program targeting *ATXN3* for the treatment of SCA3. In addition, Takeda will have the right to exclusively license multiple preclinical programs for CNS disorders, including Alzheimer's disease and Parkinson's disease. In April 2018, the Takeda Collaboration became effective and Takeda paid us $110.0 million as an upfront payment. Takeda agreed to fund our research and preclinical activities in the amount of $60.0 million during the four-year research term and to reimburse us for any collaboration-budgeted research and preclinical expenses incurred by us that exceed that amount.

Simultaneously with our entry into the collaboration and license agreement with Takeda (the "Takeda Collaboration Agreement"), we entered into a share purchase agreement with Takeda pursuant to which we agreed to sell to Takeda 1,096,892 of our ordinary shares at a purchase price of $54.70 per share (the "Takeda Equity Investment"). In April 2018, we closed the Takeda Equity Investment and received aggregate cash proceeds of $60.0 million.

Financial Operations Overview

We have never been profitable, and since our inception, we have incurred significant operating losses. Our net loss was $35.2 million and $21.1 million in the three months ended March 31, 2018 and 2017, respectively. As of March 31, 2018 and December 31, 2017, we had an accumulated deficit of $228.3 million and $192.7 million, respectively. We expect to incur significant expenses and increasing operating losses for the foreseeable future.

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 three months ended March 31, 2018 and 2017 represents revenue earned under the Pfizer Collaboration Agreement (as defined in Note 4 in the notes to the unaudited consolidated financial statements appearing elsewhere in this Quarterly Report on Form 10-Q ("Note 4")), which was entered into in May 2016. The only revenue generating license or collaboration agreements to which we are currently a party are the Pfizer Collaboration Agreement and the Takeda Collaboration Agreement, which became effective in April 2018.

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:

- compensation-related expenses, including employee salaries, bonuses, share-based compensation expense and other related benefits expenses for personnel in our research and development organization;
- expenses incurred under agreements with third parties, including contract research organizations ("CROs") that conduct research, preclinical and clinical activities on our behalf, as well as contract manufacturing organizations ("CMOs") that manufacture drug product for use in our preclinical and clinical trials;
- expenses incurred related to our internal manufacturing of drug product for use in our preclinical and clinical trials;
- expenses related to compliance with regulatory requirements;
- expenses related to third-party consultants, including fees and share based-compensation;
- research and development supplies and services expenses; and
- facility-related expenses, including rent, maintenance and other general operating expenses.

We recognize research and development costs as incurred. 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 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 research and development expenses consist primarily of expenses related to our CROs, CMOs, consultants, other external vendors and fees paid to global regulatory agencies, in addition to compensation-related expenses, facility-related expenses and other general operating expenses. These expenses are incurred in connection with research and development efforts and our preclinical and clinical studies. We track certain external expenses on a program-by-program basis. However, we do not allocate compensation-related expenses, internal manufacturing expenses, equipment repairs and maintenance expense, facility-related expenses or other operating expenses. These expenses, which are not allocated on a program-by-program basis, are included in the "Other discovery and development programs, platform development and identification of potential drug discovery candidates" category along with other external expenses related to our other discovery and development programs, as well as platform development and identification of potential drug discovery candidates.

The table below summarizes our research and development expenses incurred for the three months ended March 31, 2018 and 2017:

	Three Months Ended March 31,	
	2018	2017
	(in thousands)	
HD programs	$ 3,054	$ 1,239
DMD programs	3,060	4,736
ALS and FTD programs	1,577	265
Other discovery and development programs, platform development and identification of potential drug discovery candidates	21,505	8,500
Total research and development expenses	$ 29,196	$ 14,740

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 continue to manage our existing clinical trials, initiate additional clinical trials for certain product candidates, pursue later stages of clinical development for certain product candidates, further expand our manufacturing capabilities and continue to discover and develop additional product candidates in areas including neurology, ophthalmology and hepatic.

General and Administrative Expenses

General and administrative expenses consist primarily of compensation-related expenses, including salaries, bonuses, share-based compensation and other related benefits costs for personnel in our executive, finance, corporate, legal and administrative functions as well as compensation-related expenses for our board of directors. General and administrative expenses also include legal fees; expenses associated with being a public company; professional fees for accounting, auditing, tax and consulting services; insurance costs; travel expenses; other operating costs; and facility-related expenses.

We anticipate that our general and administrative expenses will increase in the future, primarily due to additional compensation-related expenses, including salaries, benefits, incentive arrangements and share-based compensation expense, as we increase our employee headcount to support the expected growth in our research and development activities and the potential commercialization of our product candidates.

Other Income (Expense), net

Other income (expense), net for the three months ended March 31, 2018 and 2017 consists mainly of dividend and interest income earned on cash and cash equivalents balances.

Income Taxes

We are a Singapore multi-national company subject to taxation in the United States and various other jurisdictions. The income tax provision recorded during the three months ended March 31, 2018 was the result of provision to return adjustments related to the filing of our Japanese subsidiary's 2017 tax return. The income tax provision recorded during the three months ended March 31, 2017 was primarily the result of U.S. income generated under research and management services arrangements between our U.S. subsidiary and our Singapore parent company.

Critical Accounting Policies and Significant Judgments and Estimates

Our consolidated financial statements are prepared in accordance with generally accepted accounting principles 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.

Our significant accounting policies, judgments and estimates are described in Note 2 in the 2017 Annual Report on Form 10-K as well as under the header "Revenue Recognition" in Note 2 in the notes to the unaudited consolidated financial statements appearing elsewhere in this Quarterly Report on Form 10-Q ("Note 2"). We believe that these identified policies are critical to fully understanding and evaluating our financial condition and results of operations. Furthermore, we believe that of our significant accounting policies, the estimates and assumptions involved in our revenue recognition policy, particularly (a) assessing the number of performance obligations; (b) determination of transaction price; and (c) determining the pattern over which performance obligations are satisfied, including estimates to complete performance obligations; involve a greater degree of judgment, and therefore we

consider it our critical accounting policy. We evaluate our estimates and assumptions on an ongoing basis. Our actual results may differ from these estimates under different assumptions and conditions.

Our critical accounting policy of revenue recognition changed during the three months ended March 31, 2018, due to our adoption of ASC 606 (as defined in Note 2), which is discussed in detail in Note 2.

Results of Operations

Comparison of the three months ended March 31, 2018 and 2017:

	Three Months Ended March 31,		
	2018	2017	Change
	(in thousands)		
Revenue	$ 1,422	383	$ 1,039
Operating expenses			
Research and development	29,196	14,740	14,456
General and administrative	8,001	5,850	2,151
Total operating expense	37,197	20,590	16,607
Loss from operations	(35,775)	(20,207)	(15,568)
Other income (expense), net	706	221	485
Loss before income taxes	(35,069)	(19,986)	(15,083)
Income tax benefit (provision)	(172)	(1,110)	938
Net loss	$ (35,241)	$ (21,096)	$ (14,145)

Revenue

Revenue of $1.4 million and $0.4 million for the three months ended March 31, 2018 and 2017, respectively, was earned under the Pfizer Collaboration Agreement. The $1.0 million increase was the result of increased research and development services for the first three nominated hepatic targets during the three months ended March 31, 2018 compared to the three months ended March 31, 2017. Revenue for both periods is presented under ASC 606.

Research and Development Expenses

	Three Months Ended March 31,		
	2018	2017	Change
	(in thousands)		
HD programs	$ 3,054	$ 1,239	$ 1,815
DMD programs	3,060	4,736	(1,676)
ALS and FTD programs	1,577	265	1,312
Other discovery and development programs, platform development and identification of potential drug discovery candidates	21,505	8,500	13,005
Total research and development expenses	$ 29,196	$ 14,740	$ 14,456

Research and development expenses were $29.2 million for the three months ended March 31, 2018, compared to $14.7 million for the three months ended March 31, 2017. The increase of $14.5 million was due primarily to the following:

- an increase of $1.8 million in preclinical and clinical external expenses related to our two HD programs;
- a decrease of $1.7 million in preclinical and clinical external expenses related to our DMD programs;
- an increase of $1.3 million in preclinical external expenses related to our ALS program and our FTD program, each of which targets *C9ORF72*; and
- an increase of $13.0 million in internal and external research and development expenses that are not allocated on a program-by-program basis and are related to other discovery and development programs, platform development and identification of potential drug discovery candidates, due to an increase of $4.2 million in compensation-related expenses, which is the result of an increase in employee headcount, an increase of $7.5 million in research and development supplies and services expenses and other operating expenses and an increase of $1.3 million in facility-related expenses.

General and Administrative Expenses

General and administrative expenses were $8.0 million for the three months ended March 31, 2018, as compared to $5.9 million for the three months ended March 31, 2017. The increase of approximately $2.1 million was primarily due to the $1.0 million increase in compensation-related costs resulting from an increase in employee headcount. Increased professional services expenses and other general and administrative operating expenses account for the remaining increase of approximately $1.1 million.

Income Tax Benefit (Provision)

During the three months ended March 31, 2018 and 2017, we recorded an income tax provision of $0.2 million and $1.1 million, respectively. The income tax provision recorded during the three months ended March 31, 2018 was the result of provision to return adjustments related to the filing of our Japanese subsidiary's 2017 tax return. During the three months ended March 31, 2018, we recorded no income tax benefits for the net operating losses incurred in Singapore, the United States, Japan, the United Kingdom or Ireland, due to uncertainty regarding future taxable income in these jurisdictions. The income tax provision recorded during the three months ended March 31, 2017 was primarily the result of U.S. income generated under research and management services arrangements between our U.S. subsidiary and our Singapore parent company. During the three months ended March 31, 2017, we recorded no income tax benefits for the net operating losses incurred in Singapore, Japan or Ireland, due to uncertainty regarding future taxable income in these jurisdictions.

Liquidity and Capital Resources

Since our inception, we have not generated any product revenue and have incurred recurring net losses. To date we have primarily funded our operations through private placements of debt and equity securities, public offerings of our ordinary shares and collaborations with third parties. Through March 31, 2018, we have received an aggregate of approximately $323.2 million in net proceeds from these transactions. We received $89.3 million in net proceeds from private placements of our debt and equity securities, $100.4 million in net proceeds from our initial public offering, inclusive of the over-allotment exercise, $40.0 million under the Pfizer Agreements (as defined in Note 4), including $10.0 million as an upfront payment under the Pfizer Collaboration Agreement and $30.0 million in the form of an equity investment, and $93.5 million in net proceeds from our April 2017 follow-on underwritten public offering.

As of March 31, 2018, we had cash and cash equivalents totaling $110.5 million, an accumulated deficit of $228.3 million and restricted cash of $3.6 million related to letters of credit for our leased premises in Cambridge, Massachusetts and Lexington, Massachusetts.

In April 2018, we received $170.0 million in cash under the Takeda Collaboration, including $60.0 million on April 2, 2018, when we closed on the issuance and sale of 1,096,892 ordinary shares to Takeda under the Takeda Equity Investment and $110.0 million later in April 2018 as an upfront payment under the Takeda Collaboration Agreement.

We expect that our existing cash and cash equivalents will be sufficient to fund our operations for at least the next twelve months. We have based this expectation on assumptions that may prove to be incorrect, and we may use our available capital resources sooner than we currently expect. In addition, we may elect to raise additional funds before we need them if the conditions for raising capital are favorable due to market conditions or strategic considerations, even if we expect that we have sufficient funds for our current or future operating plans.

Until we can generate significant revenue from product sales, if ever, we expect to continue to finance our operations as we have in the past, primarily through private placements of debt and equity securities, public offerings of our ordinary shares and collaborations with third parties. On January 4, 2017, we filed a universal shelf registration statement on Form S-3, which was declared effective by the SEC on February 6, 2017, on which we registered for sale up to $500.0 million of any combination of our ordinary shares, debt securities, warrants, rights, purchase contracts and/or units from time to time and at prices and on terms that we may determine. On April 18, 2017, we closed a follow-on underwritten public offering of 4,166,667 ordinary shares for gross proceeds of $100.0 million under this shelf registration. After the closing of our follow-on underwritten public offering, approximately $400.0 million of securities remain available for issuance under this shelf registration. This shelf registration statement will remain in effect for up to three years from the date it was declared effective. 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 cash flow activity:

	Three Months Ended March 31,	
	2018	2017
	(in thousands)	
Net cash used in operating activities	$ (32,426)	$ (17,418)
Net cash used in investing activities	(1,164)	(3,635)
Net cash provided by financing activities	1,537	190
Effect of foreign exchange rates on cash, cash equivalents and restricted cash	43	57
Net decrease in cash, cash equivalents and restricted cash	$ (32,010)	$ (20,806)

Operating Activities

During the three months ended March 31, 2018, operating activities used $32.4 million of cash, primarily due to our net loss of $35.2 million and changes in operating assets and liabilities of $3.1 million offset by non-cash charges of $5.9 million. The non-cash charges for the three months ended March 31, 2018 were mainly related to share-based compensation expense of $4.4 million and depreciation expense of $1.2 million.

During the three months ended March 31, 2017, operating activities used $17.4 million of cash, primarily due to our net loss of $21.1 million offset by non-cash charges of $4.1 million. The non-cash charges for the three months ended March 31, 2017 were mainly related to share-based compensation of $3.0 million and an increase in deferred rent of $1.0 million.

Investing Activities

During the three months ended March 31, 2018, investing activities used $1.2 million of cash, related to purchases of property and equipment.

During the three months ended March 31, 2017, investing activities used $3.6 million of cash, related to purchases of property and equipment.

Financing Activities

During the three months ended March 31, 2018, net cash provided by financing activities was $1.5 million, primarily due to proceeds from the exercise of share options of $1.5 million.

During the three months ended March 31, 2017, net cash provided by financing activities was $0.2 million, primarily due to proceeds from the exercise of share options of $0.2 million.

Effect of Foreign Exchange Rates on Cash

During the three months ended March 31, 2018, the effect of changes in foreign exchange rates on cash was an increase in cash of less than $0.1 million, due to fluctuations in foreign exchange rates from December 31, 2017 to March 31, 2018.

During the three months ended March 31, 2017, the effect of changes in foreign exchange rates on cash was an increase in cash of $0.1 million, due to fluctuations in foreign exchange rates from December 31, 2016 to March 31, 2017.

Funding Requirements

We expect our expenses will continue to increase in connection with our ongoing research and development activities and the expansion of our internal cGMP manufacturing capabilities. Furthermore, we anticipate that our expenses will continue to increase if and as we:

- continue to conduct our two Phase 1b/2a clinical trials evaluating our product candidates WVE-120101 and WVE-120102 in patients with HD and our Phase 1 clinical trial evaluating our product candidate WVE-210201 in patients with DMD;
- conduct research and preclinical development of discovery targets and advance additional programs into clinical development;
- file clinical trial applications with global regulatory agencies and conduct clinical trials for our programs;

- make strategic investments in expanding our research and development platform capabilities and in optimizing our manufacturing processes and formulations;
- further expand our manufacturing capabilities through our internal facility and our CMOs;
- maintain our intellectual property portfolio and consider the acquisition of complementary intellectual property;
- seek and obtain regulatory approvals for our product candidates; and
- establish and build capabilities to market, distribute and sell 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.

Because of the numerous risks and uncertainties associated with the development of drug candidates 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, results and costs of conducting research and continued preclinical and clinical development within our therapeutic programs and with respect to future potential pipeline candidates;
- the number and characteristics of product candidates and programs that we pursue;
- the cost of manufacturing clinical supplies of our product candidates;
- whether and to what extent milestone events are achieved under our collaborations with Pfizer or Takeda or any potential future licensee or collaborator;
- the costs, timing and outcome of regulatory review of our product candidates;
- our ability to obtain marketing approval for 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;
- market acceptance of our product candidates, to the extent any are approved for commercial sale, and 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.

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 when we need them, or at all. We do not currently have any committed external source of funds, except for possible future payments from Pfizer if milestones under the Pfizer Collaboration Agreement are achieved and committed funds and possible future payments from Takeda under the Takeda Collaboration Agreement, which became effective on April 2, 2018.

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

There have been no material changes to our contractual obligations and commitments set forth under the heading “Management’s Discussion and Analysis of Financial Condition and Results of Operations – Contractual Obligations and Commitments” in the 2017 Annual Report on Form 10-K.

Off-Balance Sheet Arrangements

We had no off-balance sheet arrangements (as that term is defined in Item 303(a)(4)(ii) of Regulation S-K) as of March 31, 2018 that have, or were reasonably likely to have, a current or future effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources.

Recently Issued Accounting Pronouncements

For detailed information regarding recently issued accounting pronouncements and the expected impact on our consolidated financial statements, see Note 2 “Significant Accounting Policies” in the notes to the unaudited consolidated financial statements appearing elsewhere in this Quarterly Report on Form 10-Q.

Item 3. Quantitative and Qualitative Disclosures 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, and capital market risk.

Interest Rate Risk

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

Foreign Currency Risk

Due to our operations outside of the United States, we are exposed to market risk related to changes in foreign currency exchange rates. Historically, we have not hedged our foreign currency exposure. Changes in the relative values of currencies occur regularly and, in some instances, could materially adversely affect our business, our financial condition, the results of our operations and our cash flows. For the three months ended March 31, 2018 and 2017, changes in foreign currency exchange rates did not have a material impact on our historical financial position, business, financial condition, results of operations or cash flows.

Inflation Risk

We do not believe that inflation had a material effect on our business, financial condition or results of operations for the three months ended March 31, 2018 and 2017.

Capital Market Risk

We currently have no product revenues and depend on funds raised through other sources. One possible source of funding is through further equity offerings. Our ability to raise funds in this manner depends upon capital market forces affecting our share price.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our principal executive officer and principal financial officer, evaluated the effectiveness of our disclosure controls and procedures as of March 31, 2018. The term “disclosure controls and procedures,” as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC’s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to its management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and

operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of March 31, 2018, our principal executive officer and principal financial officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in Internal Control over Financial Reporting

During the three months ended March 31, 2018, we implemented certain new internal controls in connection with our adoption of ASC 606 (as defined in Note 2 in the notes to the unaudited consolidated financial statements appearing elsewhere in this Quarterly Report on Form 10-Q). There were no other changes in our internal control over financial reporting identified in connection with the evaluation required by Rule 13a-15(d) and 15d-15(d) of the Exchange Act that occurred during the three months ended March 31, 2018 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II – OTHER INFORMATION

Item 1. Legal Proceedings

We are not currently a party to any material legal proceedings.

Item 1A. Risk Factors

In addition to the other information set forth in this Quarterly Report on Form 10-Q, you should carefully consider the factors discussed under the caption "Risk Factors" that appear in Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2017, which was filed with the Securities and Exchange Commission on March 12, 2018, as amended (the "2017 Annual Report on Form 10-K"). There have been no material changes from the risk factors previously disclosed in the 2017 Annual Report on Form 10-K.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

Recent Sales of Unregistered Equity Securities

None.

Issuer Purchases of Equity Securities

We did not repurchase any of our equity securities during the three months ended March 31, 2018.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

Not applicable.

Item 6. Exhibits

Exhibit Number	Exhibit Description	Filed with this Report	Incorporated by Reference herein from Form or Schedule	Filing Date	SEC File/Reg. Number
10.1†	Collaboration and License Agreement by and between Wave Life Sciences USA, Inc., Wave Life Sciences UK Limited and Takeda Pharmaceutical Company Limited, dated as of February 19, 2018	X			
10.2	Share Purchase Agreement by and between Takeda Pharmaceutical Company Limited and the Registrant, dated as of February 19, 2018	X			
10.3	Investor Agreement by and between Takeda Pharmaceutical Company Limited and the Registrant, dated as of April 2, 2018	X			
31.1	Rule 13a-14(a)/15d-14(a) Certification of Principal Executive Officer	X			
31.2	Rule 13a-14(a)/15d-14(a) Certification of Principal Financial Officer	X			
32*	Section 1350 Certifications of Principal Executive Officer and Principal Financial Officer	X			
101.INS	XBRL Instance Document	X			
101.SCH	XBRL Taxonomy Extension Schema Document	X			
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document	X			
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document	X			
101.LAB	XBRL Taxonomy Extension Label Linkbase Document	X			
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document	X			

(*) The certifications attached as Exhibit 32 that accompany this Quarterly Report on Form 10-Q are not deemed filed with the Securities and Exchange Commission and are not to be incorporated by reference into any filing of Wave Life Sciences Ltd. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of such Form 10-Q), irrespective of any general incorporation language contained in such filing.

(†) Confidential treatment has been requested with respect to certain portions of this exhibit. Omitted portions have been filed separately with the Securities and Exchange Commission.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Date: May 9, 2018

WAVE LIFE SCIENCES LTD.

By: /s/ Paul B. Bolno, M.D.
Paul B. Bolno, M.D.
President and Chief Executive Officer
(Principal Executive Officer)

By: /s/ Keith C. Regnante
Keith C. Regnante
Chief Financial Officer
(Principal Financial Officer and Principal Accounting Officer)

Exhibit 10.1
Execution Copy

Collaboration And License Agreement

by and among

Wave Life Sciences USA, Inc.,

Wave Life Sciences UK Limited

and

Takeda Pharmaceutical Company Limited

February 19, 2018

Portions of this Exhibit, indicated by the mark "[***]," were omitted and have been filed separately with the Securities and Exchange Commission pursuant to the Registrant's application requesting confidential treatment pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

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Portions of this Exhibit, indicated by the mark "[***]," were omitted and have been filed separately with the Securities and Exchange Commission pursuant to the Registrant's application requesting confidential treatment pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

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EXHIBITS AND SCHEDULES

Portions of this Exhibit, indicated by the mark "[***]," were omitted and have been filed separately with the Securities and Exchange Commission pursuant to the Registrant's application requesting confidential treatment pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

COLLABORATION AND LICENSE AGREEMENT

THIS COLLABORATION AND LICENSE AGREEMENT (this "**Agreement**"), entered into as of February 19, 2018 (the "**Execution Date**"), is entered into by and among Wave Life Sciences USA, Inc., a corporation organized and existing under the Laws of the State of Delaware ("**Wave US**"), Wave Life Sciences UK Limited, a private limited company incorporated under the laws of England and Wales ("**Wave UK**", and together with Wave US, "**Wave**"), and Takeda Pharmaceutical Company Limited, a corporation organized and existing under the Laws of the Japan ("**Takeda**"). Wave and Takeda are referred to in this Agreement individually as a "**Party**" and collectively as the "**Parties**."

RECITALS:

WHEREAS, Wave is a genetic medicine company focused on advancing Oligonucleotides that precisely target the underlying causes of rare diseases;

WHEREAS, Takeda possesses expertise in developing and commercializing therapeutics;

WHEREAS, Wave intends, through this Agreement, to enter into a collaboration with Takeda in which Takeda will be Wave's partner in the field of CNS-related therapeutics, on the terms and conditions set forth herein; and

WHEREAS, Wave and Takeda desire to collaborate to research, develop, and commercialize stereopure Oligonucleotide therapeutics directed toward various CNS indications, and Wave and Takeda would assume further development, manufacturing, and commercialization related to the Collaboration Compounds, the Collaboration Products, and Companion Diagnostics directed to a Collaboration Target, discovered in the collaboration as further described in this Agreement.

NOW, **THEREFORE**, in consideration of the foregoing premises and the mutual covenants herein contained, the Parties hereby agree as follows:

1. DEFINITIONS

Unless specifically set forth to the contrary herein, the following terms, whether used in the singular or plural, will have the respective meanings set forth below:

1.1 "**AAA**" has the meaning set forth in Section 17.3.8.1 (Expedited Arbitration).

1.2 "**Accounting Standards**" means GAAP, with respect to Wave and IFRS, with respect to Takeda, and GAAP or IFRS, as applicable, with respect to any Related Party, in each case, as generally and consistently applied throughout the Party's organization. Each Party will promptly notify the other in the event that it changes the Accounting Standards pursuant to which its records are maintained; *provided*, *however*, that each Party may only use internationally recognized accounting principles (*e.g.*, IFRS, GAAP, etc.).

1.3 "**Acquirer**" means, collectively, with respect to the acquisition of a Party by a Third Party, a Third Party referenced in the definition of Change of Control and such Third Party's Affiliates, other than the applicable Party in the definition of Change of Control and such Party's Affiliates (determined as of immediately prior to the closing of such Change of Control).

1.4 [***].

1.5 [***].

1.6 "**Affiliate**" means, with respect to a Person, any other Person that controls, is controlled by, or is under common control with such Person. For purposes of this Agreement, a Person will be deemed to control another Person if it owns or controls, directly or indirectly, more than fifty percent (50%) of the equity securities of such other Person entitled to vote in the election of directors (or, in the case that such other Person is not a corporation, for the election of the corresponding managing authority), or otherwise has the power to direct the management and policies of such other Person. The Parties acknowledge that in the case of certain entities organized under the laws of certain countries outside the United States, the maximum percentage ownership permitted by law for a foreign investor may be less than fifty percent (50%), and that in such case such lower percentage will be substituted in the preceding sentence, *provided that* such foreign investor has the power to direct the management and policies of such entity.

1.7 "**Agreement**" has the meaning set forth in the Preamble.

1.8 "**Alliance Manager**" has the meaning set forth in Section 9.1 (Alliance Manager).

1.9 "**Allowable Overruns**" means, (a) on a Licensed Category 1 Target-by-Licensed Category 1 Target basis, (i) any amount that is [***]; or (b) on a Licensed Category 2 Target-by-Licensed Category 2 Target basis, (i) any amount that is [***].

1.10 "**Analytical Methods**" will have the meaning set forth in the applicable Supply Agreement.

1.11 "**ANDA**" means an Abbreviated New Drug Application and all amendments and supplements thereto filed with the FDA under Section 505(j) of the FD&C Act (21 USC 355(j)), or the equivalent application filed with any equivalent Regulatory Authority outside the U.S. (including any supra-national agency), including pursuant to Article 10.1 of Directive 2001/83/EC of the European Parliament and Council of 6 November 2001, or any enabling legislation thereof.

1.12 "**Annual Research Fee**" has the meaning set forth in Section 11.4.1.1 (Initial Licensed Category 2 Research Term).

1.13 "**Antitrust Laws**" means any federal, state or foreign law, regulation or decree, including the HSR Act, designed to prohibit, restrict, or regulate actions for the purpose or effect of monopolization or restraint of trade.

1.14 "**Audited Party**" has the meaning set forth in Section 11.6.3 (Records and Audits).

1.15 "**Auditing Party**" has the meaning set forth in Section 11.6.3 (Records and Audits).

1.16 "**Auditor**" has the meaning set forth in Section 11.6.3 (Records and Audits).

1.17 "**Bankrupt Party**" has the meaning set forth in Section 10.6 (Bankruptcy).

1.18 "**Bankruptcy Code**" has the meaning set forth in Section 16.5 (Termination for Insolvency).

1.19 "**Branding Strategy**" has the meaning set forth in Section 8.5.1 (Branding).

1.20 "**Brief**" has the meaning set forth in Section 17.3.8.2 (Expedited Arbitration).

1.21 "**Business Day**" means a calendar day other than a Saturday, Sunday, or a bank or other public holiday in Massachusetts or New York in the United States or in Tokyo in Japan.

1.22 "**Calendar Quarter**" means the respective periods of three (3) consecutive calendar months ending on March 31, June 30, September 30, and December 31 of each Calendar Year.

1.23 "**Calendar Year**" means each successive period of twelve (12) months commencing on January 1 and ending on December 31.

1.24 "**Candidate Category 1 Compound**" means, for each Candidate Category 1 Target, any Oligonucleotide directed to such Candidate Category 1 Target [***].

1.25 "**Candidate Category 1 Development Plan**" has the meaning set forth in Section 5.1.2 (Candidate Category 1 Development Plan).

1.26 "**Candidate Category 1 Development Term**" means the time period commencing on the Effective Date and ending on the date on which the Candidate Category 1 Development Term has terminated for each Candidate Category 1 Target. The "Candidate Category 1 Development Term" as it applies to a specific Candidate Category 1 Target [***].

1.27 "**Candidate Category 1 Products**" any pharmaceutical product, including all forms, presentations, strengths, doses and formulations thereof (including any method of delivery), containing or delivering a Candidate Category 1 Compound alone or as a Combination Product.

1.28 "**Candidate Category 1 Target**" means any Target set forth on Schedule 1.28 for which Candidate Category 1 Compounds or Candidate Category 1 Products are being Developed pursuant to an applicable Candidate Category 1 Development Plan.

1.29 "**Candidate Category 1 Target Development Critical Matters**" means the approval of (a) any [***].

1.30 "**Candidate In-Licenses**" means any agreement entered into [***].

1.31 "**Candidate Target Know-How**" has the meaning set forth in Section 13.3.2 (Existing Wave In-License).

1.32 "**Candidate Target Patents**" has the meaning set forth in Section 13.3.1 (Wave Technology).

1.33 "**Candidate Target Technology**" has the meaning set forth in Section 13.3.2 (Existing Wave In-Licenses).

1.34 "**Category 1 Compounds**" means any Candidate Category 1 Compound or Licensed Category 1 Compound.

1.35 "**Category 1 Development Milestone Event**" has the meaning set forth in Section 11.3.3 (Category 1 Targets Development Milestone Payments).

1.36 "**Category 1 Development Milestone Payment**" has the meaning set forth in Section 11.3.3 (Category 1 Targets Development Milestone Payments).

1.37 "**Category 1 Development Plan**" means any Candidate Category 1 Development Plan or Licensed Category 1 Development Plan.

1.38 "**Category 1 Development Program**" has the meaning set forth in Section 5.1.1 (Category 1 Development Overview).

1.39 "**Category 1 Development Term**" means the Candidate Category 1 Development Term and the Licensed Category 1 Development Term.

1.40 "**Category 1 Development Report**" has the meaning set forth in Section 5.1.6 (Category 1 Development Reports).

1.41 "**Category 1 Products**" means any Candidate Category 1 Product or Licensed Category 1 Product.

1.42 "**Category 1 Targets**" means any Candidate Category 1 Target or Licensed Category 1 Target.

1.43 "**Category 2 Development Milestone Event**" has the meaning set forth in Section 11.4.2 (Licensed Category 2 Products Development Milestone Payments).

1.44 "**Category 2 Development Milestone Payment**" has the meaning set forth in Section 11.4.2 (Licensed Category 2 Products Development Milestone Payments).

1.45 "**Category 2 Research Committee**" has the meaning set forth in Section 9.4.1 (Purpose; Formation; Dissolution).

1.46 "**Category 2 Royalty**" has the meaning set forth in Section 11.4.4 (Category 2 Royalties).

1.47 "**Category 2 Sales Milestone Event**" has the meaning set forth in Section 11.4.3 (Licensed Category 2 Targets Category 2 Sales Milestone Payments).

1.48 "**Category 2 Sales Milestone Payment**" has the meaning set forth in Section 11.4.3 (Licensed Category 2 Targets Sales Milestone Payments).

1.49 "**Category 2 Target Specific Extension**" has the meaning set forth in Section 5.2.2 (Licensed Category 2 Research Term).

1.50 "**cGMP**" means current good manufacturing practices as required by the FDA under provisions of 21 C.F.R. Parts 210 and 211 and all applicable FDA rules, regulations, orders and guidances, and the requirements with respect to current good manufacturing practices prescribed by the European Community under provisions of "The Rules Governing Medicinal Products in the European Community, Volume 4, Good Manufacturing Practices, Annex 13, Manufacture of Investigational Medicinal Products, July 2003," or as otherwise required by applicable Laws.

1.51 "**Change of Control**" means, with respect to a Party, (a) a merger, consolidation, recapitalization, or reorganization of such Party with a Third Party that results in the voting securities of such Party outstanding immediately prior thereto, or any securities into which such voting securities have been converted or exchanged, ceasing to represent at least fifty percent (50%) of the combined voting power of the surviving entity or the parent of the surviving entity immediately after such merger, consolidation, recapitalization, or reorganization, (b) a transaction or series of

related transactions in which a Third Party, together with its Affiliates, becomes the direct or indirect beneficial owner of fifty percent (50%) or more of the combined voting power of the outstanding securities of such Party, or (c) the sale or other transfer to a Third Party of all or substantially all of such Party's and its controlled Affiliates' assets. Notwithstanding the foregoing, any transaction or series of transactions effected for the purpose of financing the operations of the applicable Party or changing the form or jurisdiction of organization of such Party (such as an initial public offering or other offering of equity securities to non-strategic investors or corporate reorganization) will not be deemed a "Change of Control" for purposes of this Agreement.

1.52 "**Classification Approval Matters**" means whether to (a) [***].

1.53 "**Clinical Study**" means a Phase 1 Study, Phase 2 Study, Phase 3 Study, POM Study, Registrational Study, study performed as part of any Post-Marketing Commitment, or other study (including a non-interventional study) in humans to obtain information regarding a product, including information relating to the safety, tolerability, pharmacological activity, pharmacokinetics, dose ranging, or efficacy of such product.

1.54 "**Clinical Supply Agreement**" has the meaning set forth in Section 7.7 (Manufacturing and Supply Agreements).

1.55 "**Clinical Supply Term Sheet**" has the meaning set forth in Section 7.7 (Manufacturing and Supply Agreements).

1.56 "**CMC**" means Chemistry and Manufacturing Controls, which includes (a) Manufacturing process development records for a Collaboration Compound, Collaboration Product, or Combination Product directed to any Collaboration Target, (b) all chemistry, Manufacturing, and control procedures necessary for Manufacture of a Collaboration Compound, Collaboration Product, or Combination Product directed to any Collaboration Target, and (c) sourcing and testing of all raw materials and components used in the Manufacture of a Collaboration Compound, Collaboration Product, or Combination Product directed to any Collaboration Target.

1.57 "**CNS**" means central nervous system.

1.58 "**Collaboration Compound**" means any Candidate Category 1 Compound, Licensed Category 1 Compound, or Licensed Category 2 Compound.

1.59 "**Collaboration In-License**" has the meaning set forth in Section 10.5.4 (Collaboration In-Licenses).

1.60 "**Collaboration Product**" means any Category 1 Products or Licensed Category 2 Product.

1.61 "**Collaboration Target**" means any Candidate Category 1 Target, Licensed Category 1 Target, or Licensed Category 2 Target.

1.62 "**Combination Product**" means a Licensed Product that is (a) sold in the form of a combination that contains or comprises one or more additional therapeutically active pharmaceutical agents (whether coformulated or copackaged or otherwise sold for a single price) other than a Licensed Compound in the Licensed Product, or (b) sold for a single price together with any (i) delivery device or component therefor, (ii) Companion Diagnostic related to any Licensed Category 2

Product, process, service, or therapy, or (iii) product, process, service, or therapy other than the Licensed Product (each, (i) – (iii), an "**Other Component**"); or (c) defined as a "combination product" by the FDA pursuant to 21 C.F.R. §3.2(e) or its foreign equivalent. For clarity, a Companion Diagnostic related to a Licensed Category 1 Product will not be an "Other Component" for purposes of this Agreement.

1.63 "**Commercial Supply Agreement**" has the meaning set forth in Section 7.7 (Manufacturing and Supply Agreements).

1.64 "**Commercial Supply Term Sheet**" has the meaning set forth in Section 7.7 (Manufacturing and Supply Agreements).

1.65 "**Commercialization**" **or** "**Commercialize**" means any and all activities directed to transporting, storing, marketing, detailing, Promotion, distributing, importing, exporting, using, offering to sell or selling a product, including (a) strategic marketing, sales force detailing, sales force training and allocation, advertising, planning, messaging, branding; (b) all customer support, patient services, case management, Distribution Matters, invoicing and sales activities; (c) design and conduct of Post-Marketing Commitments or other post-approval Clinical Studies not required to obtain, support, or maintain Regulatory Approval (other than Pricing Approval) for the applicable product; and (d) activities directed to obtaining Pricing Approvals, negotiating discounts and obtaining product access, as applicable. For the avoidance of doubt, "Commercialization" includes all Wave Commercialization Activities.

1.66 "**Commercialization Plans**" means, collectively, each Licensed Category 1 Commercialization Plan and Licensed Category 1 Commercialization Budget included therein, and each Licensed Category 2 Commercialization Plan.

1.67 "**Commercially Reasonable Efforts**" means [***].

1.68 "**Companion Diagnostic**" means any product or service that: (a) identifies a person having a disease or condition or a molecular genotype or phenotype that predisposes a person to such disease or condition, in each case, for which a Collaboration Compound or Collaboration Product could be used to treat or prevent such disease or condition; (b) defines the prognosis or monitors the progress of a disease or condition in a person for which a Collaboration Compound or Collaboration Product could be used to treat or prevent such disease or condition; (c) is used to select a therapeutic or prophylactic regimen, wherein at least one (1) potential such therapeutic or prophylactic regimen involves a Collaboration Compound or Collaboration Product, and where the selected regimen is determined to likely be effective or to be safe for a person, based on the use of such product or service; or (d) is used to confirm a biological activity or to optimize dosing or the scheduled administration of a Collaboration Compound or Collaboration Product.

1.69 "**Competitive Infringement**" means, on a Collaboration Product-by-Collaboration Product and country-by-country basis, where the making, using, selling, offering for sale, importing, or exporting by any Third Party (other than any Sublicensee or authorized purchaser or other transferee of such Collaboration Product), of any pharmaceutical product in a country Covered by a Valid Claim of a Wave Patent or Takeda Patent in such country, including any application, submission, or notice under 21 U.S.C. §355(b)(2)(A)(iv) or 355(j)(2)(A)(vii)(IV) or a certification that is, or is comparable to, a Paragraph IV Patent Certification by a Third Party filing an ANDA, or other similar patent certification by a Third Party, in each case, that comprises, incorporates, or otherwise competes with any Collaboration Product.

1.70 "**Completion of the IND-Enabling Study(ies)**" means the date of receipt of the [***].

1.71 "**Completion of the POM Study**" means, with respect to a Candidate Category 1 Product, the date of [***] from the applicable POM Study per the applicable protocol for such Candidate Category 1 Product and in a [***].

1.72 "**Confidential Information**" means any and all confidential or proprietary information and data and all other scientific, pre-clinical, clinical, regulatory, manufacturing, marketing, financial and commercial information or data that is or has been provided by one Party to the other Party in connection with this Agreement, whether communicated in writing or orally or by any other method.

1.73 "**Consolidated Report**" has the meaning set forth in Paragraph 2.2 of Schedule 11.3.4 (Licensed Category 1 Profit & Loss Share).

1.74 "**Control**" means, with respect to any Materials, Regulatory Materials, or intellectual property rights, including any Patents or Know-How, the possession (whether by ownership, license, or sublicense, other than by a license, sublicense, or other right granted pursuant to this Agreement (but not assignment)) by a Party of the ability to assign, transfer, or grant to the other Party the licenses, sublicenses, or rights to access and use such Materials, Regulatory Materials, or intellectual property rights as provided for in this Agreement, without violating the terms of any agreement or other arrangement with any Third Party in existence as of the time such Party would be required hereunder to grant such license, sublicense, or rights of access and use. Notwithstanding anything in this Agreement to the contrary, a Party will be deemed not to Control any Materials, Regulatory Materials, or intellectual property rights that are owned or in-licensed by an Acquirer, [***].

1.75 "**Conversion Notice**" has the meaning set forth in Section 3.4.2.1 (Conversion Notice).

1.76 "**Cover**," "**Covering**," or "**Covered**" means, with respect to a particular subject matter at issue and the relevant Patent, that, but for a license granted to a Person under a claim included in such Patent or ownership of such Patent, the Exploitation by such Person of the subject matter at issue, would infringe such claim or, in the case of a Patent that is a patent application, would infringe a claim in such patent application if it were to issue as a patent.

1.77 "**Critical Matter**" means the (a) [***], (b) determination of any [***], (c) determination of any [***], (d) determination as to whether any [***], (e) determination of whether a [***], (f) determination by [***], (g) any change in scope or other alteration to [***], or (h) changes to the scope of the [***].

1.78 "**CRO**" means a contract research organization.

1.79 "**Data Lock**" means, with respect to a Clinical Study being conducted by or on behalf of a Party, the locking by or on behalf of such Party of the database that contains the data collected from such Clinical Study in a manner consistent with industry standards to enable data analysis and reporting.

1.80 "**Data Package**" means, on a Candidate Category 1 Target-by-Candidate Category 1 Target basis, the information set forth on Schedule 1.80 for all Candidate Category 1 Compounds, Candidate Category 1 Products, and Companion Diagnostics directed to such Candidate Category 1 Target, [***].

1.81 "**Develop**" and "**Development**" means any and all activities related to the design, discovery, generation, identification, profiling, characterization, production, process development, testing method development, pre-clinical development or non-clinical or pre-clinical studies, clinical drug development activities conducted before or after obtaining Regulatory Approval that are reasonably related to or leading to the development, preparation, or submission of data and information to a Regulatory Authority for the purpose of obtaining, supporting or expanding Regulatory Approval (other than Pricing Approval), including all activities related to pharmacokinetic profiling, design and conduct of Clinical Studies (but excluding Post-Marketing Commitments), research or development of Companion Diagnostics regulatory affairs, statistical analysis, report writing, and regulatory filing creation and submission (including the services of outside advisors and consultants in connection therewith).

1.82 "**Development Expenses**" means, with respect to a Licensed Category 1 Target, all costs and expenses incurred directly in connection with the performance of any Development activities for Licensed Category 1 Compounds, Licensed Category 1 Products, or Companion Diagnostics directed to such Licensed Category 1 Target, in each case, in accordance with the applicable Licensed Category 1 Development Plans, Licensed Category 1 Development Budgets, or Licensed Category 1 Transition Plans, [***] with respect to Licensed Category 1 Compounds, Licensed Category 1 Products, and Companion Diagnostics directed to such Licensed Category 1 Target, and costs related to preparing and filing for Regulatory Approval or submissions to Regulatory Authorities (including associated filing fees, translation expenses, and legal and other professional services fees), [***]. In addition, Development Expenses will include all Third Party Payments made by a contracting Party under a Collaboration In-License related to Licensed Category 1 Compounds, Licensed Category 1 Products, or Companion Diagnostics directed to any Licensed Category 1 Target during the Term to the extent not treated as Other Operating Income/Expense. Development Expenses will be recognized in accordance with applicable Accounting Standards.

1.83 "**Development Lead**" means, [***], (a) Wave for (i) all Category 1 Compounds, Category 1 Products, and Companion Diagnostics directed to each Category 1 Target, and (ii) during the applicable Licensed Category 2 Research Term for a Licensed Category 2 Target, all Licensed Category 2 Compounds, Licensed Category 2 Products, and Companion Diagnostics directed to such Licensed Category 2 Target, and (b) Takeda after the Licensed Category 2 Research Term for all Licensed Category 2 Compounds, Licensed Category 2 Products, and Companion Diagnostics directed to each Licensed Category 2 Target.

1.84 "**Development Milestone Event**" has the meaning set forth in Section 11.4.2 (Licensed Category 2 Products Development Milestone Payments).

1.85 "**Development Milestone Payment**" has the meaning set forth in Section 11.4.2 (Licensed Category 2 Products Development Milestone Payments).

1.86 "**Development Plans**" means collectively all (a) Candidate Category 1 Development Plans, (b) Licensed Category 1 Development Plans, (c) Licensed Category 2 Research Plans, and (d) Licensed Category 2 Development Plans.

1.87 "**Disclosure Letter**" has the meaning set forth in Section 13.3 (Additional Wave Representations and Warranties as of the Option Notice Date).

1.88 "**Disputes**" has the meaning set forth in Section 17.3.1 (Disputes).

1.89 "**Distribution Costs**" means the [***]. Distribution expenses should be recognized in accordance with applicable Accounting Standards.

1.90 "**Distribution Matters**" means all issues and decisions regarding the distribution of a Licensed Product, including decisions as to whether and with which wholesalers and distributors to contract, and the terms of contracts with such wholesalers and distributors.

1.91 "**DOJ**" means the U.S. Department of Justice.

1.92 "**Dollars**" or "**$**" means the legal tender of the United States of America.

1.93 "**Effective Date**" has the meaning set forth in Section 17.18.4 (Effective Date).

1.94 "**Eligible Commercialization Expenses**" means the [***],

in each case, to the extent such costs are included in the [***].

Eligible Commercialization Expenses specifically exclude (i) the cost of activities that [***], and (ii) any costs or expenses of a Party or its Affiliates to the extent [***].

If any cost or expense is specifically identifiable or reasonably allocable to more than one cost category set forth above in clause (a) through (f), then such cost or expense will only be counted as an Eligible Commercialization Expense with respect to one such category. [***].

For clarity, Eligible Commercialization Expenses will be recognized in accordance with applicable Accounting Standards.

1.95 "**Eligible Development Expenses**" means, on a Licensed Category 1 Target-by-Licensed Category 1 Target basis, the Development Expenses for such Licensed Category 1 Target [***]. Eligible Development Expenses will also include any [***]. Eligible Development Expenses specifically exclude any costs or expenses of a Party or its Affiliates to the extent [***]. No expense included as an Eligible Development Expense will also be included as an Eligible Commercialization Expense.

1.96 "**EMA**" means the European Medicines Agency and any successor Governmental Authority having substantially the same function.

1.97 "**Equity Agreements**" means that certain (a) Share Purchase Agreement entered into by Takeda and Wave Singapore, on or about the date hereof (the "**Share Purchase Agreement**"), and (b) Investor Agreement entered into by Takeda and Wave Singapore, on or about the date hereof, in each case, as may be amended or restated from time to time.

1.98 "**EU**" means the European Union, as its membership may be constituted from time to time, and any successor thereto.

1.99 "**Execution Date**" has the meaning set forth in the preamble.

1.100 "**Executive Officer**" means, for Wave, its Chief Executive Officer, and for Takeda, its Chief Medical and Scientific Officer or another senior executive officer or their respective designee with appropriate responsibilities, seniority, and decision-making authority; *provided that* any of

the foregoing individuals may designate the Chief Financial Officer as his/her designee for financial related matters. In the event that the position of any of the Executive Officers identified in this Section 1.100 (Executive Officer) no longer exists due to a Change of Control, corporate reorganization, corporate restructuring, or the like that results in the elimination of the identified position, then the applicable Party will replace the applicable Executive Officer with another executive officer with responsibilities and seniority comparable to the eliminated Executive Officer.

1.101 "**Existing Takeda In-License**" means any agreements entered into by Takeda or an Affiliate with a Third Party prior to the Effective Date, including any amendments or restatements thereto entered into during the Term in accordance with Section 10.5 (In-Licenses), pursuant to which Takeda or any of its Affiliates Controls any Takeda Technology, but excluding any Collaboration In-License to which Takeda or its Affiliates is a party.

1.102 "**Existing Wave In-License**" means any agreements entered into by Wave or an Affiliate with a Third Party prior to the Effective Date, including any amendments or restatements thereto entered into during the Term in accordance with Section 10.5 (In-Licenses), pursuant to which Wave or any of its Affiliates Controls any Wave Technology, but excluding any Candidate In-License and any Collaboration In-License to which Wave or its Affiliates is a party.

1.103 "**Expedited Arbitration**" has the meaning set forth in Section 17.3.8 (Expedited Arbitration).

1.104 "**Expedited Dispute**" has the meaning set forth in Section 17.3.8 (Expedited Arbitration).

1.105 "**Expert**" means [***].

1.106 "**Exploit**" or "**Exploitation**" means to make, have made, import, have imported, export, have exported, distribute, have distributed, use, have used, sell, have sold, offer for sale, or have offered for sale, including to research, Develop, Manufacture, Commercialize, register, modify, enhance, improve, or otherwise dispose of.

1.107 "**Ex-U.S. Licensed Category 1 Commercialization Budget**" has the meaning set forth in Section 8.1.2 (Licensed Category 1 Commercialization Plans).

1.108 "**Ex-U.S. Licensed Category 1 Commercialization Plan**" has the meaning set forth in Section 8.1.2 (Licensed Category 1 Commercialization Plans).

1.109 "**Ex-U.S. Territory Licensed Category 1 Profit & Loss Share**" has the meaning set forth in Section 11.3.4 (Licensed Category 1 Profit & Loss Share for Commercialization Activities**)**.

1.110 "**Ex-U.S. P&L**" has the meaning set forth in Schedule 11.3.4 (Licensed Category 1 Profit & Loss Share for Commercialization Activities).

1.111 "**Ex-U.S. Territory**" means the Territory other than the U.S.

1.112 "**FDA**" means the United States Food and Drug Administration or any successor agency thereto.

1.113 "**FD&C Act**" means the United States Federal Food, Drug, and Cosmetic Act, as amended.

1.114 "**Field**" means all fields of use.

1.115 "**Finance Officers**" has the meaning set forth in Section 11.3.2.2 (Eligible Development Expenses Report).

1.116 "**First Commercial Sale**" means, [***].

1.117 "**FTC**" means the U.S. Federal Trade Commission or any successor agency thereto.

1.118 "**FTE**" means a full-time person, or in the case of less than a full-time person, a full-time equivalent [***] of a Party or its Related Parties, based on [***] per year. Overtime, and work on weekends, holidays, and the like [***].

1.119 "**FTE Costs**" means, for any period, the FTE Rate multiplied by the number of FTEs in such period. FTEs will be pro-rated on a daily basis if necessary.

1.120 "**FTE Rate**" means [***]. Notwithstanding the foregoing, for any Calendar Year during the Term that is less than a full year, the above referenced rate will be proportionately reduced to reflect such portion of FTEs for such full Calendar Year.

1.121 "**GAAP**" means generally accepted accounting principles as practiced in the United States, as consistently applied.

1.122 "**GCP**" means the ethical, scientific, and quality standards required by FDA for designing, conducting, recording, and reporting trials that involve the participation of human subjects, as set forth in FDA regulations in 21 C.F.R. Parts 11, 50, 54, 56, 312, 314, and 320 and all related FDA rules, regulations, orders, and guidances, and by the International Conference on Harmonization E6: Good Clinical Practices Consolidated Guideline (the "**ICH Guidelines**"), or as otherwise required by applicable Laws.

1.123 "**Generic Product**" means, with respect to a particular Licensed Category 2 Product and on a country-by-country basis, a generic pharmaceutical product that is marketed for sale by a Third Party (not licensed, supplied or otherwise permitted by a Party or any Related Parties) and that contains the same or substantially the same active ingredient as the Licensed Category 2 Compound in such Licensed Category 2 Product and is approved for use in such country by a Regulatory Authority (a) pursuant to an ANDA; or (b) through a regulatory pathway referencing clinical data submitted by a Party or its Related Parties to obtain Regulatory Approval for such Licensed Category 2 Product.

1.124 "**Gene Therapy**" means a therapy that involves [***].

1.125 "**GLP**" means good laboratory practice as required by the FDA under 21 C.F.R. Part 58 and all applicable FDA rules, regulations, orders, and guidances, and the requirements with respect to good laboratory practices prescribed by the European Community, the OECD (Organization for Economic Cooperation and Development Council) and the ICH Guidelines, or as otherwise required by applicable Laws.

1.126 "**Governmental Authority**" means any applicable government authority, court, council, tribunal, arbitrator, agency, department, bureau, branch, office, legislative body, commission or other instrumentality of (a) any government of any country or territory, (b) any nation, state, province, county, city, or other political subdivision thereof, or (c) any supranational body.

1.127 "**Granting Party**" means the Party that grants any licenses or other rights to the other Party under this Agreement.

1.128 "**Gross Profit**" means, [***].

1.129 "**H-W Suit Notice**" has the meaning set forth in Section 15.5.2.2 (Hatch-Waxman).

1.130 "**HSR Act**" means the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended, and the rules promulgated thereunder.

1.131 "**HSR Conditions**" means the following conditions, collectively: (a) the applicable waiting period under the HSR Act will have expired or earlier been terminated; (b) no injunction (whether temporary, preliminary, or permanent) prohibiting consummation of the transaction contemplated by this Agreement or any material portion hereof will be in effect; and (c) no judicial or administrative proceeding opposing consummation of all or any part of this Agreement will be pending.

1.132 "**HSR Filing**" means filings with the United States Federal Trade Commission and the Antitrust Division of the United States Department of Justice of a Notification and Report Form for Certain Mergers and Acquisitions (as that term is defined in the HSR Act) with respect to the subject matter of this Agreement, together with all required documentary attachments thereto.

1.133 "**HTT Compound**" means [***].

1.134 "**HTT Product**" means [***].

1.135 "**HTT Target**" means [***].

1.136 "**ICH Guidelines**" has the meaning set forth in Section 1.122 (GCP).

1.137 "**Improvements**" means Wave Improvements and Takeda Improvements.

1.138 "**IND**" means an Investigational New Drug application (as defined in the FD&C Act), clinical trial application or similar application or submission for approval to conduct human clinical investigations filed with or submitted to a Regulatory Authority anywhere in the world in conformance with the requirement of such Regulatory Authority, and any amendments thereto.

1.139 "**IND-Enabling Study**" means a toxicology study, in species that satisfies applicable regulatory requirements, using applicable GLP that meets the standard necessary for submission as part of an IND with the applicable Regulatory Authority.

1.140 "**IND Safety Reporting**" has the meaning set forth in Section 1.262 (Safety Concern).

1.141 "**Indemnified Party**" has the meaning set forth in Section 14.4 (Indemnification Procedure).

1.142 "**Indemnifying Party**" has the meaning set forth in Section 14.4 (Indemnification Procedure).

1.143 "**Indication**" means a disease or pathological condition for which clinical results for such disease or condition and a separate NDA application or a supplement (or other addition) to an existing

NDA application is required for the purpose of obtaining Regulatory Approval (other than Pricing Approval) in a country; [***].

1.144 "**Initial Licensed Category 2 Research Term**" means the time period commencing on the Effective Date and ending upon the earlier of (a) the fourth (4th) anniversary of the commencement of the Licensed Category 2 Research Term, or (b) the effective date of termination of this Agreement in its entirety or with respect to all Licensed Category 2 Targets.

1.145 "**Initiation**" means, with respect to a Clinical Study of a product, the first dosing of the first human subject pursuant to the applicable protocol for such Clinical Study.

1.146 "**In-Licenses**" means, collectively, the Existing Wave In-Licenses, the Existing Takeda In-Licenses, and the Collaboration In-Licenses.

1.147 "**Joint Collaboration IP**" means, collectively, (a) any Know-How first developed or conceived jointly by employee(s), agent(s), or consultant(s) acting on behalf of Wave or its Affiliates, on the one hand, and employee(s), agent(s), or consultant(s) acting on behalf of Takeda or its Affiliates, on the other hand, in the performance of any activities under this Agreement, in each case that is not a Wave Improvement or Takeda Improvement as applicable, and (b) any Patents that claim such Know-How.

1.148 "**Joint Collaboration Patents**" has the meaning set forth in 15.4.3.1 (Takeda First Right).

1.149 "**JRA Exception**" has the meaning set forth in Section 15.1.2 (JRA Exception).

1.150 "**JSC**" has the meaning set forth in Section 9.2.1 (Purpose; Formation; Dissolution).

1.151 "**Know-How**" means all commercial, technical, scientific and other know-how and information, inventions, discoveries, trade secrets, knowledge, technology, methods, processes, practices, formulae, instructions, skills, techniques, procedures, experiences, ideas, technical assistance, designs, drawings, assembly procedures, computer programs, specifications, data and results (including biological, chemical, pharmacological, toxicological, pharmaceutical, physical and analytical, preclinical, clinical, safety, manufacturing and quality control data and know-how, including regulatory data, study designs and protocols), and Materials, in all cases, whether or not confidential, proprietary, patentable, in written, electronic or any other form now known or hereafter developed, but excluding all Patents.

1.152 "**Laws**" means all applicable laws, statutes, rules, regulations, orders, judgments, injunctions, ordinances, codes, principles of common law, or other pronouncements having the binding effect of law of any Governmental Authority, including if either Party is or becomes subject to a legal obligation to a Regulatory Authority or other Governmental Authority (such as a corporate integrity agreement or settlement agreement with a Governmental Authority).

1.153 "**Lead Category 1 CP**" has the meaning set forth in Section 3.3.1 (Option Notice; Data Package).

1.154 "**Lead Category 1 LP**" means, with respect to each Candidate Category 1 Target for which Takeda exercises an Option in accordance with this Agreement, the Lead Category 1 CP with respect to such Candidate Category 1 Target.

1.155 "**Lead Category 2 LP**" has the meaning set forth in Section 5.3.2 (Licensed Category 2 Transition Plan).

1.156 "**Lead Initial HTT Compounds**" means those Category 1 Compounds directed to the HTT Target set forth in Schedule 1.156.

1.157 "**Lead Initial HTT Product**" means any pharmaceutical product, including all forms, presentations, strengths, doses and formulations thereof (including any method of delivery), containing or delivering a Lead Initial HTT Compound alone or as a Combination Product.

1.158 "**Licensed Category 1 Commercialization Budget**" has the meaning set forth in Section 8.1.2 (Licensed Category 1 Commercialization Plans).

1.159 "**Licensed Category 1 Commercialization Plans**" has the meaning set forth in Section 8.1.2 (Licensed Category 1 Commercialization Plans).

1.160 "**Licensed Category 1 Compounds**" means, for each Licensed Category 1 Target, [***].

1.161 "**Licensed Category 1 Development Budget**" has the meaning set forth in Section 5.1.3 (Licensed Category 1 Development Plan).

1.162 "**Licensed Category 1 Development Plan**" has the meaning set forth in Section 5.1.3 (Licensed Category 1 Development Plan).

1.163 "**Licensed Category 1 Development Term**" means, on a Licensed Category 1 Target-by-Licensed Category 1 Target basis, the time period commencing on the applicable Licensed Target Date for such Licensed Category 1 Target and ending upon the earlier of (a) the launch of the final Licensed Category 1 Product directed to such Licensed Category 1 Target, or (b) the effective date of termination of this Agreement in its entirety or with respect to such Licensed Category 1 Target.

1.164 "**Licensed Category 1 Global Commercialization Strategy**" has the meaning set forth in Section 8.1.1 (Licensed Category 1 Global Commercialization Strategy).

1.165 "**Licensed Category 1 Joint Team**" has the meaning set forth in Section 9.3.1 (Formation; Composition; Dissolution).

1.166 "**Licensed Category 1 Products**" any pharmaceutical product, including all forms, presentations, strengths, doses and formulations thereof (including any method of delivery), containing or delivering a Licensed Category 1 Compound alone or as a Combination Product.

1.167 "**Licensed Category 1 Profit & Loss Share**" has the meaning set forth in Section 11.3.4 (Licensed Category 1 Profit & Loss Share for Commercialization Activities).

1.168 "**Licensed Category 1 Program**" means, on a Licensed Category 1 Target-by-Licensed Category 1 Target basis, the Development and Commercialization in accordance with this Agreement of all Licensed Category 1 Compounds, Licensed Category 1 Products, and Companion Diagnostics directed to a Licensed Category 1 Target during the Licensed Category 1 Development Term.

1.169 "**Licensed Category 1 Target**" means any Candidate Category 1 Target for which Takeda has exercised an Option in accordance with Section 3.4.4 (Exercise of Options).

1.170 "**Licensed Category 1 Transition Budget**" has the meaning set forth in Section 5.1.7 (Licensed Category 1 Transition Plan).

1.171 "**Licensed Category 1 Transition Plan**" has the meaning set forth in Section 5.1.7 (Licensed Category 1 Transition Plan).

1.172 "**Licensed Category 2 Commercialization Plan**" has the meaning set forth in Section 8.2.1 (Licensed Category 2 Commercialization Plans).

1.173 "**Licensed Category 2 Compound**" means, for each Licensed Category 2 Target, [***].

1.174 "**Licensed Category 2 Development Plan**" has the meaning set forth in Section 5.3.3 (Licensed Category 2 Development Plan).

1.175 "**Licensed Category 2 Development Program**" has the meaning set forth in Section 5.3.1 (Licensed Category 2 Development Overview).

1.176 "**Licensed Category 2 Development Term**" means, on a Licensed Category 2 Target-by-Licensed Category 2 Target basis, the time period commencing on the [***].

1.177 "**Licensed Category 2 Products**" means any pharmaceutical product, including all forms, presentations, strengths, doses and formulations thereof (including any method of delivery), containing or delivering a Licensed Category 2 Compound alone or as a Combination Product.

1.178 "**Licensed Category 2 Program**" means, on a Licensed Category 2 Target-by-Licensed Category 2 Target basis, the Development and Commercialization in accordance with this Agreement of all Licensed Category 2 Compounds, Licensed Category 2 Products, and Companion Diagnostics directed to a Licensed Category 2 Target during the Licensed Category 2 Development Term.

1.179 "**Licensed Category 2 Research Budget**" has the meaning set forth in Section 5.2.3 (Licensed Category 2 Research Plans).

1.180 "**Licensed Category 2 Research Expenses**" means, with respect to a Licensed Category 2 Target, [***] for Licensed Category 2 Compounds, Licensed Category 2 Products, or Companion Diagnostics directed to such Licensed Category 2 Target, in each case, in accordance with the applicable [***].

1.181 "**Licensed Category 2 Research Plan**" has the meaning set forth in Section 5.2.3 (Licensed Category 2 Research Plans).

1.182 "**Licensed Category 2 Research Program**" has the meaning set forth in Section 5.2.1 (Licensed Category 2 Research Overview).

1.183 "**Licensed Category 2 Research Report**" has the meaning set forth in Section 5.2.6 (Licensed Category 2 Research Reports).

1.184 "**Licensed Category 2 Research Term**" means, on a Licensed Category 2 Target-by-Licensed Category 2 Target basis, the time period commencing on the Effective Date and ending upon the earlier of (a) completion of all activities under the Licensed Category 2 Research Plan for such Licensed Category 2 Target, or (b) the effective date of termination of this Agreement in its entirety or with respect to such Licensed Category 2 Target.

1.185 "**Licensed Category 2 Target**" means a Proposed Category 2 Target approved as a Licensed Category 2 Target in accordance with Section 4.1 (Proposed Category 2 Targets).

1.186 "**Licensed Category 2 Target Cap**" has the meaning set forth in Section 4.4 (Total Targets).

1.187 "**Licensed Category 2 Transition Budget**" has the meaning set forth in Section 5.3.2 (Licensed Category 2 Transition Plan).

1.188 "**Licensed Category 2 Transition Plan**" has the meaning set forth in Section 5.3.2 (Licensed Category 2 Transition Plan).

1.189 "**Licensed Compound**" means any Licensed Category 1 Compound or Licensed Category 2 Compound.

1.190 "**Licensed Product**" means any Licensed Category 1 Product or Licensed Category 2 Product.

1.191 "**Licensed Target**" means any Licensed Category 1 Target and any Licensed Category 2 Target.

1.192 "**Licensed Target Date**" means, on an Option-by-Option basis, the date on which an Option Exercise Notice delivered by Takeda to Wave for such Option in accordance with Section 3.4.1 (Option Exercise Notice) takes effect, including, if applicable, the occurrence of the HSR Conditions with respect to any HSR Filing made in connection therewith; [***], then the "Licensed Target Date" for such Option will be deemed to not have occurred for purposes of this Agreement and the applicable Candidate Category 1 Target for which Takeda exercised such Option will not be a Licensed Category 1 Target and will be a Terminated Target as of the date of expiration of the cure period for such payment.

1.193 "**Loss of Market Exclusivity**" means an event where, with respect to any Licensed Category 2 Product in [***].

1.194 "**Losses**" has the meaning set forth in Section 14.1 (General Indemnification by Takeda).

1.195 "**Major Market Country(ies)**" means [***].

1.196 "**Manufacturing**" or "**Manufacture**" means all activities related to the manufacture of compounds or products or any component or ingredient thereof, including manufacturing supplies for Development, or Commercialization, formulation, manufacturing scale-up, labeling, filling, processing, packaging, in-process and finished product testing, release of product or any component or ingredient thereof, quality assurance and quality control activities related to manufacturing and release of product, ongoing stability tests, storage, shipment, and regulatory activities related to any of the foregoing.

1.197 "**Manufacturing Costs**" means, with respect to any Collaboration Compound, Collaboration Product, or Companion Diagnostic directed to any Collaboration Target, the consolidated fully burdened manufacturing cost in accordance with the applicable Accounting Standards, which will be the sum of:

[***].

1.198 "**Manufacturing Lead**" means, on a Collaboration Target-by-Collaboration Target basis, [***].

1.199 "**Material Communications**" means written, telephonic, or in-person communications from or with any Regulatory Authority concerning any of the following: [***].

1.200 "**Materials**" means all tangible compositions of matter, devices, articles of manufacture, assays, biological, chemical, or physical materials, and other similar materials.

1.201 "**Medical Affairs**" means, with respect to a Licensed Product and Companion Diagnostics related to such Licensed Product, the performance of activities by or on behalf of a Party with respect to: continuing medical education therefor; development, publication, and dissemination of publications; exhibiting and presenting at seminars and conventions; conducting health economic studies; conducting health care professional and patient speakers programs; conducting appropriate activities involving opinion leaders; engaging medical science liaisons and conducting medical science liaison activities; conducting advisory board meetings or other consultant programs; and establishing clinical consumer and patient registries.

1.202 "**Medical Affairs Costs**" means the [***].

1.203 "**Milestone Payments**" has the meaning set forth in Section 11.4.3 (Licensed Category 2 Targets Category 2 Sales Milestone Payments).

1.204 "**Named Candidate Category 1 Compounds**" has the meaning set forth in Section 13.3 (Additional Wave Representations and Warranties as of the Option Notice Date).

1.205 "**Named Candidate Category 1 Products**" has the meaning set forth in Section 13.3 (Additional Wave Representations and Warranties as of the Option Notice Date).

1.206 "**Named Companion Diagnostics**" has the meaning set forth in Section 13.3 (Additional Wave Representations and Warranties as of the Option Notice Date).

1.207 "**NDA**" means any (a) New Drug Application pursuant to the FD&C Act submitted to the FDA, or (b) substantially similar application or submission thereto submitted to a Regulatory Authority in a country or group of countries within the Territory to obtain Regulatory Approval (but not Pricing Approval) to Commercialize a Collaboration Product in that country or in that group of countries, including, with respect to the EU, a Marketing Authorization Application submitted to the EMA pursuant to the centralized approval procedure or to the applicable Regulatory Authority of a country in the EU with respect to the mutual recognition or any other national approval.

1.208 "**Net Sales**" means, (a) with respect to a Licensed Category 1 Product or a Companion Diagnostic related to any Licensed Category 1 Product, the gross amounts invoiced or received by or on behalf of a [***] for any Licensed Category 1 Product or Companion Diagnostic related to any

Licensed Category 1 Product, in each case, sold to Third Parties, and (b) with respect to a Licensed Category 2 Product, the gross amounts invoiced or received by or on behalf of a [***] for any Licensed Category 2 Product sold to Third Parties [***], in each case ((a) and (b)), in *bona fide*, arms-length transactions, as determined in accordance with such Party's Accounting Standards as consistently applied, less the following deductions, booked on an accrual basis by such (i) [***].

Notwithstanding the foregoing, in no event may the Party calculating Net Sales on gross amounts invoiced or received by or on behalf of such Party or any of its Related Parties for any Licensed Product or Companion Diagnostic related to any Licensed Category 1 Product take a deduction in a manner that is inconsistent with such Party's Accounting Standard.

[***].

If a Licensed Product is sold as part of a Combination Product in a country in the Territory, then Net Sales for the Licensed Product included in such Combination Product in such country will be calculated as follows:

If the Licensed Product and the Other Components in such Combination Product are both sold separately in such country, then Net Sales for the Licensed Product will be calculated by [***].

If the Licensed Product is sold separately in such country, but the Other Components contained in the Combination Product are not sold separately in such country, then Net Sales for the Licensed Product will be calculated by [***];

If the Licensed Product is not sold separately in such country, but the Other Components contained in the Combination Product are sold separately in such country, then Net Sales for the Licensed Product will be calculated by multiplying [***]

If neither the Licensed Product nor the Other Components contained in the Combination Product are sold separately in such country, then Net Sales will be calculated by [***].

1.209 "**Non-Bankrupt Party**" has the meaning set forth in Section 10.6 (Bankruptcy).

1.210 "**Non-Conforming Product**" means any Collaboration Product that (a) does not meet the specifications therefor set forth in the applicable Supply Agreement, (b) is adulterated or misbranded, or (c) is otherwise not Manufactured in compliance with applicable Law, including cGMP.

1.211 "**Non-Granting Party**" means the Party to whom licenses or rights are granted under this Agreement.

1.212 "**Oligonucleotide**" means [***].

1.213 "**Operating Profits or Losses**" means, for all Licensed Category 1 Products and Companion Diagnostics related to any Licensed Category 1 Product, the profits or losses calculated in accordance with Schedule 11.3.4.

1.214 "**Option**" or "**Options**" has the meaning set forth in Section 3.1 (Grant of Options).

1.215 "**Option Exercise Fee**" has the meaning set forth in Section 11.3.1 (Option Exercise Fee).

1.216 "**Option Exercise Notice**" means the written notice Takeda delivers to Wave to exercise an Option with respect to a Candidate Category 1 Target, substantially in the form set forth on Schedule 1.216, containing the information set forth in such form.

1.217 "**Option Exercise Period**" means, on an Option-by-Option basis, the time period commencing upon the Effective Date and ending upon the earliest of (a) the Licensed Target Date for such Option, (b) [***] days after the date of Takeda's receipt of the Data Package for such Option, as such period may be extended in accordance with Section 3.3.4 (Extension of Option Exercise Period) or as such period may be defined with respect to the HTT Target in accordance with Section 3.2 (HTT Target), (c) the termination of such Option in accordance with Section 3.4.6 (Termination of Option), or (d) the termination of this Agreement in its entirety or with respect to the Candidate Category 1 Target for such Option.

1.218 "**Option Notice**" has the meaning set forth in Section 3.3.1 (Option Notice; Data Package).

1.219 "**Option Notice Date**" has the meaning set forth in Section 13.3 (Additional Wave Representations and Warranties as of the Option Notice Date).

1.220 "**Other Component**" has the meaning set forth in 1.62 (Combination Product).

1.221 "**Other Operating Income/Expense**" means [***].

1.222 "**Out-of-Pocket Costs**" means, with respect to certain activities for a Collaboration Compound, Collaboration Product, or Companion Diagnostic directed to any Collaboration Target, as applicable, hereunder, [***].

1.223 "**Overhead Costs**" means costs incurred by a Party or for its account that are attributable to a Party's [***].

1.224 "**Party**" or "**Parties**" has the meaning set forth in the preamble.

1.225 "**Patent**" means all patents and patent applications (including all continuations, continuations-in-part, divisionals, and substitutions), or other filings claiming priority thereto or sharing any common priority therewith, as well as any patents issued with respect to any such patent applications, reissues, re-examinations, renewals, or extensions (including patent term adjustments, patent term extensions, supplemental protection certificates, or the equivalents thereof), registration or confirmation patents, patents resulting from post-grant proceedings, patents of addition, restorations and extensions thereof, and any inventor's certificates, and all equivalents and counterparts thereof in any country. For clarity, a patent filing (a patent or a patent application) is considered to have been made (or to be pending or in force) within a selected time period if the filing itself, or any other filing to which it claims priority or with which it shares any common priority, was made within (or was pending or in force within) the time period.

1.226 "**Patent Challenge**" has the meaning set forth in Section 16.3 (Termination for Patent Challenge).

1.227 "**Patent(s) Costs**" means [***].

1.228 "**Patent Offices**" has the meaning set forth in Section 13.2.8 (Validity and Enforceability).

1.229 "**Person**" means any natural person, corporation, unincorporated organization, partnership, association, sole proprietorship, joint stock company, joint venture, limited liability company, trust or government, or Governmental Authority, or any other similar entity.

1.230 "**Phase 1 Study**" means a clinical study of an investigational product in subjects with the primary objective of characterizing its safety, tolerability, and pharmacokinetics and identifying a recommended dose and regimen for future studies as described in 21 C.F.R. 312.21(a), or a comparable Clinical Study prescribed by the relevant Regulatory Authority in a country other than the United States.

1.231 "**Phase 2 Study**" means a clinical study of an investigational product in subjects with the primary objective of characterizing its activity in a specific disease state as well as generating more detailed safety, tolerability, pharmacokinetics, pharmacodynamics, and dose finding information as described in 21 C.F.R. 312.21(b), or a comparable Clinical Study prescribed by the relevant Regulatory Authority in a country other than the United States including a human clinical trial that is also designed to satisfy the requirements of 21 C.F.R. 312.21(a) or corresponding foreign regulations and is subsequently optimized or expanded to satisfy the requirements of 21 C.F.R. 312.21(b) (or corresponding foreign regulations) or otherwise to enable a Phase 3 Study (*e.g.*, a phase 1/2 trial).

1.232 "**Phase 3 Study**" means a clinical study of an investigational product in subjects that incorporates accepted endpoints for confirmation of statistical significance of efficacy and safety with the aim to generate data and results that can be submitted to obtain Regulatory Approval as described in 21 C.F.R. 312.21(c), or a comparable Clinical Study prescribed by the relevant Regulatory Authority in a country other than the United States.

1.233 "**Positive Non-Human Data**" has the meaning set forth in Schedule 5.1.2.

1.234 "**Post-Marketing Commitments**" means any item, activity, task, a non-human study, human clinical study, or other commitment with respect to a product initiated after receipt of Regulatory Approval (other than Pricing Approval) for such product in a country or territory, the completion of which is recommended or required by the Regulatory Authority in such country or territory in connection with the initial grant of, or to support or maintain such, Regulatory Approval for such product in such country or territory.

1.235 "**Potential Candidate Category 1 In-License**" has the meaning set forth in Section 10.5.2(Candidate Category 1 In-Licenses).

1.236 "**Potential Candidate Category 1 In-License Term Sheet**" has the meaning set forth in Section 10.5.2 (Candidate Category 1 In-Licenses).

1.237 "**Potential In-License**" has the meaning set forth in Section 10.5.3 (Potential In-Licenses).

1.238 "**Pricing Approval**" means any governmental approval, agreement, determination, or decision establishing the prices for a product that can be charged or reimbursed in regulatory jurisdictions where the applicable Governmental Authorities negotiate, approve, or determine the price or reimbursement of pharmaceutical products.

1.239 "**Pricing Matters**" means all issues and decisions regarding (a) price, price terms and other contract terms with respect to product sales, including discounts, rebates, other price concessions and service fees to payors and purchasers, and (b) reimbursement programs applicable to a product. For clarity, "Pricing Matters" includes all financial issues and financial decisions with respect to contracting with managed care entities, hospitals, pharmacies, group purchasing organizations, pharmacy benefit managers, and Governmental Authorities, and specifically includes issues and decisions about the offer of discounts or rebates for formulary placement for products.

1.240 "**Promotion**" means (a) any and all activities directed to the marketing, detailing, promotion of a product after Regulatory Approval has been obtained (including making, having made, using, importing, exporting, selling, and offering for sale such product), and will include post-launch marketing, promoting, detailing, marketing research, distributing, customer service, administering commercially selling, having sold, or otherwise disposing or offering to dispose of such product, importing, exporting, or transporting such product for commercial sale, and all regulatory compliance with respect to the foregoing, and (b) otherwise marketing, selling, or exploiting commercially a product.

1.241 "**Promotional Materials**" means all marketing training materials, grants, sponsorships, and all written, printed, graphic, electronic, audio, or video matter, including journal advertisements, sales visual aids, leave-behind items, formulary binders, reprints, direct mail, direct-to-consumer advertising, internet postings and sites, and broadcast advertisements intended for use or used by or on behalf of either Party or their respective Related Parties in connection with any promotion of and education related to a Licensed Product.

1.242 "**Proof of Mechanism Study**" or "**POM Study**" means, on a Candidate Category 1 Target-by-Candidate Category 1 Target basis, the first Clinical Study that is designed to satisfy the POM Criteria set forth on Schedule 1.242 (as may be amended by the JSC in accordance with this Agreement) in patients for a Candidate Category 1 Product directed to a Candidate Category 1 Target.

1.243 "**Proposed Category 2 Target**" has the meaning set forth in Section 4.1 (Proposed Category 2 Targets).

1.244 "**Proposed Category 2 Target Nomination Notice**" has the meaning set forth in Section 4.1 (Proposed Category 2 Targets).

1.245 "**Prosecution and Maintenance**" or "**Prosecute and Maintain**" means, with regard to a particular Patent, the preparation, filing, prosecution and maintenance of such Patent, as well as re-examinations, reissues and the like with respect to that Patent.

1.246 [***].

1.247 "**Registrational Study**" means a Clinical Study (regardless of whether or not called a "Phase 3 Study") for a product the results of which, together with prior data and information concerning such product, are intended to be sufficient, without any additional Clinical Study, to meet the evidentiary standard for demonstrating the safety and efficacy of such active substance of such product established by a Regulatory Authority in any particular jurisdiction and is sufficient for filing of an NDA for such product in patients having the disease or condition being studied.

1.248 "**Regulatory Approval**" means, with respect to a country or extra-national territory, any and all approvals (including approvals of NDAs), licenses, registrations, or authorizations of any Regulatory Authority necessary in order to commercially distribute, sell, or market a pharmaceutical product in such country or some or all of such extra-national territory, [***]. For the avoidance of doubt, Regulatory Approval received in the US in an expedited manner or in the EU in a conditional manner, in each case, is a Regulatory Approval for purposes of this definition.

1.249 "**Regulatory Authority**" means any Governmental Authority involved in granting Regulatory Approvals of pharmaceutical products, including the FDA, the EMA, the Japanese Ministry of Health, Labour and Welfare, and the Pharmaceuticals and Medical Devices Agency in Japan.

1.250 "**Regulatory Exclusivity**" means any exclusive marketing rights or data exclusivity rights conferred by any Regulatory Authority with respect to a Licensed Product other than Patents, that limits or prohibits a Person from (a) relying on safety or efficacy data generated by or on behalf of the Parties with respect to such Licensed Product in an application for Regulatory Approval of a Generic Product, or (b) Commercializing a Licensed Product or a Generic Product, including rights conferred in the U.S. under the Hatch-Waxman Act or the FDA Modernization Act of 1997 (including pediatric exclusivity), orphan drug exclusivity, or rights similar thereto outside the U.S.

1.251 "**Regulatory Lead**" means, [***].

1.252 "**Regulatory Materials**" means any regulatory application, submission, notification, communication, correspondence, registration, Regulatory Approval, or other filing made to, received from or otherwise conducted with a Regulatory Authority related to Developing, Manufacturing, obtaining marketing authorization, marketing, selling or otherwise Commercializing a pharmaceutical product in a particular country or jurisdiction.

1.253 "**Related Party(ies)**" means a Party's Affiliates and Sublicensees.

1.254 "**Reversion License**" has the meaning set forth in Section 16.6.3 (Reversion License).

1.255 "**Reversion Product**" means all Collaboration Compounds, Collaboration Products, and Companion Diagnostics that are directed to a Terminated Target (which will be all such Collaboration Compounds, Collaboration Products, and Companion Diagnostics in the case of termination of this Agreement in its entirety), in each case, in the form that each such Collaboration Compound, Collaboration Product, and Companion Diagnostic exist as of the date of notice of such termination, and any improvements, modifications or enhancements thereof.

1.256 [***].

1.257 [***].

1.258 [***].

1.259 "**Royalty Rates**" has the meaning set forth in Section 11.4.4 (Category 2 Royalties).

1.260 "**Royalty Report**" has the meaning set forth in Section 11.6.2 (Reports and Royalty Payments).

1.261 "**Royalty Term**" has the meaning set forth in Section 11.4.4.1 (Royalty Term).

1.262 "**Safety Concern**" means, with respect to any Collaboration Compound or Collaboration Product, (a) any safety concern required to be reported under 21 C.F.R. § 312.32 ("IND Safety Reporting") if an IND with respect to such Collaboration Compound or Collaboration Product was open at the time of the observation (or that would be so reportable if an IND was not open at such time), or (b) a toxicity or drug safety issue or a Serious Adverse Event reasonably related to or observed in connection with Development or Commercialization activities with respect to a Collaboration Compound or Collaboration Product.

1.263 "**Sales and Marketing Costs**" means, for a Licensed Category 1 Product or Companion Diagnostic related to any such Licensed Category 1 Product, the [***] by a Party or its Affiliates that are directly attributable to Commercialization activities for such Licensed Category 1 Product or Companion Diagnostic, including [***].

1.264 "**SDEA**" means one or more Safety Data Exchange Agreements entered into by the Parties relating to Collaboration Compounds or Collaboration Products.

1.265 "**Selling Parties**" has the meaning set forth in Section 1.208 (Net Sales).

1.266 "**Serious Adverse Event**" means an adverse drug experience or circumstance that results in any of the following outcomes (a) death, (b) life-threatening condition, (c) inpatient hospitalization or a prolongation of existing hospitalization, (d) persistent or significant disability or incapacity or substantial disruption of the ability to conduct normal life functions, (e) or a congenital anomaly/birth defect, (f) significant intervention required to prevent permanent impairment or damage, or (g) a medical event that may not result in death, be life-threatening, or require hospitalization but, based on appropriate medical judgment, that may jeopardize the patient or subject and may require medical or surgical intervention to prevent one of the outcomes described in clauses (a) through (f).

1.267 "**Share Purchase Agreement**" has the meaning set forth in Section 1.97 (Equity Agreements).

1.268 "**Subcommittee**" means the Licensed Category 1 Joint Team, the Category 2 Research Committee, and any other subcommittee formed by the JSC in accordance with Section 9.6.2 (Decisions of the JSC).

1.269 "**Sublicensee**" means a Third Party to which a Party or its Affiliate has granted or grants rights to Develop, Manufacture, or Commercialize any Collaboration Compound, Collaboration Product, or Companion Diagnostic, or any further sublicensee of such rights (regardless of the number of tiers, layers or levels of sublicenses of such rights), in each case, in accordance with Section 10.4 (Sublicensing Terms), as applicable.

1.270 "**Sublicense Revenue**" means revenue recognized by [***].

1.271 "**Supply Agreements**" has the meaning set forth in Section 7.7 (Manufacturing and Supply Agreements).

1.272 [***].

1.273 "**Supply Price**" has the meaning set forth in Section 7.4 (Costs and Expenses of Manufacturing).

1.274 "**Takeda**" has the meaning set forth in the preamble.

1.275 "**Takeda Acquisition**" has the meaning set forth in Section 13.6.5 (Takeda Acquisition).

1.276 "**Takeda Acquisition Program**" has the meaning set forth in Section 13.6.5 (Takeda Acquisition).

1.277 "**Takeda COC Program**" has the meaning set forth in Section 13.6.4 (Takeda Change of Control).

1.278 "**Takeda Collaboration IP**" means (a) any Know-How first developed or conceived solely by employees of Takeda or its Affiliates or other persons not employed by Takeda or its Affiliates acting on behalf of Takeda or its Affiliates in the performance of any activities under this Agreement, and (b) any Patents that claim such Know-How. Takeda Collaboration IP excludes Takeda Improvements and Takeda's interest in Joint Collaboration IP.

1.279 "**Takeda Improvements**" means any [***].

1.280 "**Takeda Indemnitees**" has the meaning set forth in Section 14.2 (General Indemnification by Wave).

1.281 "**Takeda In-Licenses**" means any Existing Takeda In-License or any Collaboration In-License to which Takeda is a party.

1.282 "**Takeda Know-How**" means Know-How Controlled by Takeda or its Affiliates as of the Effective Date or during the Term that is reasonably necessary to Exploit a Collaboration Compound, Collaboration Product, or Companion Diagnostic directed to any Collaboration Target in the Field in the Territory, but excluding the Takeda Improvements, Takeda's interest in Joint Collaboration IP, and Takeda Collaboration IP.

1.283 "**Takeda Patents**" means Patents Controlled by Takeda or its Affiliates as of the Effective Date or during the Term that are reasonably necessary to Exploit a Collaboration Compound, Collaboration Product, or Companion Diagnostic directed to any Collaboration Target in the Field in the Territory, excluding Joint Collaboration Patents, Patents that Cover any of the Takeda Improvements, and any Patents included in the Takeda Collaboration IP. Schedule 1.283 provides a listing of Patents that are Controlled by Takeda or its Affiliates as of the Effective Date and therefore will be Takeda Patents to the extent that they are reasonably necessary to Exploit a Collaboration Compound, Collaboration Product, or Companion Diagnostic directed to any Collaboration Target in the Field in the Territory.

1.284 "**Takeda Prosecuted Patents**" has the meaning set forth in Section 15.4.1.1 (General).

1.285 "**Takeda Technology**" means, collectively, (a) the Takeda Patents, (b) Takeda Know-How, (c) the Takeda Improvements, (d) Takeda Collaboration IP, and (e) Takeda's interest in the Joint Collaboration IP.

1.286 "**Target**" means any biological target that has or is anticipated to have a [***] to which a pharmaceutical compound binds in order to elicit a therapeutic or other pharmacodynamic response.

1.287 "**Tax**" and "**Taxation**" means any U.S. and non-U.S. federal, state, local, regional, municipal, or other tax or taxation, levy, duty, charge, withholding, or other assessment of any kind (including any related fine, penalty, addition to tax, surcharge, or interest) imposed by, or payable to, a Governmental Authority, including sales, use, excise, stamp, transfer, property, value added, goods and services, withholding, and franchise taxes.

1.288 "**Technical Failure**" means [***].

1.289 "**Term**" has the meaning set forth in Section 16.1 (Term).

1.290 "**Term Sheets**" has the meaning set forth in Section 7.7 (Manufacturing and Supply Agreements).

1.291 "**Terminated Target**" means any Collaboration Target for which this Agreement has been terminated by either Party. All Collaboration Targets will be deemed Terminated Targets to the extent this Agreement is terminated in its entirety.

1.292 "**Territory**" means worldwide.

1.293 "**Third Party**" means any Person other than Takeda, Wave, or their respective Affiliates.

1.294 "**Third Party Manufacturing Agreements**" has the meaning set forth in Section 7.9.2 (Third Party Agreements).

1.295 "**Third Party Payment**" has the meaning set forth in Section 10.5 (In-Licenses).

1.296 "**Trademark**" means any trademark, trade name, service mark, service name, brand, domain name, trade dress, logo, slogan, or other indicia of origin or ownership, including the goodwill and activities associated with each of the foregoing.

1.297 "**Transition Plan**" means any Licensed Category 1 Transition Plan or Licensed Category 2 Transition Plan.

1.298 [***].

1.299 [***].

1.300 "**United States**" or "**U.S.**" means the United States and its territories, possessions and commonwealths.

1.301 "**US Government**" means the federal government of the United States.

1.302 "**U.S. Licensed Category 1 Commercialization Budgets**" has the meaning set forth in Section 8.1.2 (Licensed Category 1 Commercialization Plans).

1.303 "**U.S. Licensed Category 1 Commercialization Plans**" has the meaning set forth in Section 8.1.2 (Licensed Category 1 Commercialization Plans).

1.304 "**U.S. Licensed Category 1 Profit & Loss Share**" has the meaning set forth in Section 11.3.4 (Licensed Category 1 Profit & Loss Share for Commercialization Activities).

1.305 "**U.S. P&L**" has the meaning set forth in Schedule 11.3.4.

1.306 "**Valid Claim**" means a claim of a Patent that (a) has not been rejected, revoked or held to be invalid, unpatentable, or unenforceable by a court or other authority of competent jurisdiction, from which decision no appeal can be further taken, and (b) has not been finally abandoned, disclaimed or admitted to be invalid or unenforceable through reissue, re-examination, or disclaimer, or otherwise. In order to be a Valid Claim, any claim being prosecuted in a pending patent application must be prosecuted in good faith and not have been pending for more than [***] from the filing date of the first utility patent application (or equivalent concept in any such country) in the patent application family in the country in question, in which case it will cease to be considered a Valid Claim until the patent issues and recites said claim.

1.307 "**Validated**" means [***].

1.308 "**VAT**" means, within the EU, such Tax as may be charged in accordance with (but subject to derogations from) Directive 2006/112/EC and, outside the EU, value added Tax or any form of consumption Tax, as well as all other forms of Taxes charged on the supply of a good or a service, including but not limited to sales Tax and goods and services Tax.

1.309 "**Wave**" has the meaning set forth in the preamble.

1.310 "**Wave Acquisition**" has the meaning set forth in Section 13.6.3 (Wave Acquisition).

1.311 "**Wave Acquisition Program**" has the meaning set forth in Section 13.6.3 (Wave Acquisition).

1.312 "**Wave COC Program**" has the meaning set forth in Section 13.6.2 (Wave Change of Control).

1.313 "**Wave Collaboration IP**" means (a) any Know-How first developed or conceived solely by employees of Wave or its Affiliates or other persons not employed by Wave or its Affiliates, acting on behalf of Wave or its Affiliates in the performance of any activities under this Agreement, and (b) any Patents that claim such Know-How. Wave Collaboration IP excludes Wave Improvements and Wave's interest in Joint Collaboration IP.

1.314 "**Wave Commercialization Activities**" means, [***].

1.315 [***].

1.316 "**Wave Improvements**" means any [***].

1.317 "**Wave Indemnitees**" has the meaning set forth in Section 14.1 (General Indemnification by Takeda).

1.318 "**Wave In-Licenses**" means any Existing Wave In-License, Candidate In-Licenses, or any Collaboration In-License to which Wave is a party.

1.319 "**Wave Know-How**" means Know-How Controlled by Wave or its Affiliates as of the Effective Date or during the Term that is reasonably necessary to Exploit a Collaboration Compound, Collaboration Product, or Companion Diagnostic directed to any Collaboration Target in the Field in the Territory, but excluding the Wave Improvements, Wave's interest in Joint Collaboration IP, and Wave Collaboration IP.

1.320 "**Wave Patents**" means those Patents Controlled by Wave or its Affiliates as of the Effective Date or during the Term that (a) Cover the composition of matter of, or the method of making or using, a Collaboration Compound, Collaboration Product, or Companion Diagnostic directed to any Collaboration Target; or (b) are otherwise reasonably necessary to Exploit a Collaboration Compound, Collaboration Product, or Companion Diagnostic directed to any Collaboration Target in the Field in the Territory, in each case ((a) and (b)), but excluding any Patents that Cover inventions that (i) arise in the performance of activities under this Agreement and (ii) are Wave Improvements, Joint Collaboration IP, or Wave Collaboration IP.

1.321 "**Wave Prosecuted Patents**" has the meaning set forth in 15.4.2.1 (General).

1.322 "**Wave Ratio**" has the meaning set forth in Section 11.1 (Upfront Payment).

1.323 "**Wave Singapore**" means Wave Life Sciences Ltd.

1.324 "**Wave Technology**" means (a) Wave Know-How, (b) Wave Patents, (c) Wave Improvements, (d) Wave Collaboration IP, and (e) Wave's interest in the Joint Collaboration IP.

1.325 "**Wave UK**" has the meaning set forth in the preamble.

1.326 "**Wave US**" has the meaning set forth in the preamble.

2. COLLABORATION OVERVIEW

2.1. **Collaboration Overview.** Pursuant to this Agreement, Wave and Takeda wish to Develop Collaboration Compounds, Collaboration Products, or Companion Diagnostics directed to Collaboration Targets, with the goal of obtaining Regulatory Approval therefor and thereafter, Commercializing Licensed Compounds, Licensed Products, and Companion Diagnostics directed to any Licensed Target in the Field in the Territory. For each Candidate Category 1 Target, Wave will lead the Development of Candidate Category 1 Compounds, Candidate Category 1 Products, and Companion Diagnostics directed to such Candidate Category 1 Target through Completion of the POM Study for the first Candidate Category 1 Product directed to such Candidate Category 1 Target, and Takeda will have an Option to participate with Wave in the Development of, and to lead the Commercialization of Licensed Category 1 Compounds, Licensed Category 1 Products, and Companion Diagnostics directed to such Licensed Category 1 Target in the Field in the Territory. For each Licensed Category 2 Target, Wave will lead the pre-clinical and non-clinical Development for Licensed Category 2 Compounds, Licensed Category 2 Products, and Companion Diagnostics directed to such Licensed Category 2 Target through Completion of the IND-Enabling Studies for the first Major Market Country for the Lead Category 2 LP directed to each Licensed Category 2 Target, and Takeda will thereafter have an exclusive license to Develop and Commercialize Licensed Category 2 Compounds, Licensed Category 2 Products, and Companion Diagnostics directed to such Licensed Category 2 Target in the Field in the Territory.

2.2. [***].

3. GRANT AND EXERCISE OF OPTIONS

3.1. Grant of Options. On a Candidate Category 1 Target-by-Candidate Category 1 Target basis, Wave hereby grants to Takeda an exclusive option to obtain the license set forth in Section 10.2.1 (License Grant to Takeda) and for Takeda to grant to Wave the license set forth in Section 10.2.2 (License Grant to Wave), in each case, with respect to the corresponding Licensed Category 1 Compounds, Licensed Category 1 Products, and Companion Diagnostics directed to the corresponding Licensed Category 1 Target (each, an "**Option**" and, collectively, the "**Options**"), which Options may be exercised on a Candidate Category 1 Target-by-Candidate Category 1 Target basis at Takeda's sole discretion during the Option Exercise Period for such Candidate Category 1 Target in accordance with Section 3.4.1 (Option Exercise Notice) and Section 3.4.4 (Exercise of Options).

3.2. HTT Target. Notwithstanding anything to the contrary set forth in this Agreement, Takeda may exercise the Option for the HTT Target at any time during the period commencing on the Effective Date and continuing until the latest to occur of the following times: [***]. If Takeda exercises the Option for the HTT Target at any time in accordance with Section 3.4.1 (Option Exercise Notice) and Section 3.4.4 (Exercise of Options), then (i) Takeda will be deemed to have exercised the HTT Target for all HTT Compounds and HTT Products, (ii) the Licensed Target Date for the Option for the HTT Target will be deemed to have occurred, and (iii) Wave will have no obligation to deliver any subsequent Data Packages for the HTT Target.

3.3. Information Sharing.

3.3.1. **Option Notice; Data Package.** For each Candidate Category 1 Target, [***], Wave will prepare a complete Data Package for the applicable Candidate Category 1 Target and provide a written notice to Takeda (such notice, an "**Option Notice**") that includes:

3.3.1.1. a letter identifying the applicable Candidate Category 1 Target to which the Option applies and the Lead Category 1 CP and other Candidate Category 1 Compounds and Candidate Category 1 Products directed to such Candidate Category 1 Target;

3.3.1.2. the Data Package for such Candidate Category 1 Target, which will be made available to Takeda through an electronic data room;

3.3.1.3. an initial Licensed Category 1 Development Plan for the Lead Category 1 CP directed to such Candidate Category 1 Target;

3.3.1.4. a Disclosure Letter for such Candidate Category 1 Target; and

3.3.1.5. a certification of an officer of Wave as to the accuracy and completeness of the provided information, and a statement that, subject to the disclosures contained in the Disclosure Letter for such Candidate Category 1 Target, the representations and warranties of Wave set forth in Section 13.3 (Additional Wave Representations and Warranties as of the Option Notice Date) are true and correct in all material respects with respect to such Candidate Category 1 Target as of the date of delivery of such Option Notice.

3.3.2. **Incomplete Data Package**. Following receipt of an Option Notice, Takeda will have [***] Business Days to notify Wave if the Data Package included therein is missing any information required pursuant to the relevant Candidate Category 1 Development Plan or set forth on Schedule 1.80, which notice will describe such missing information. Wave will provide Takeda with all missing information identified in such notice within [***] after the date of Takeda's request (if and to the extent that such information is available to Wave).

3.3.3. **Due Diligence**. Following the date of delivery of the Option Notice for a Candidate Category 1 Target and during its Option Exercise Period, to assist Takeda in conducting thorough due diligence to decide whether to exercise an Option for such Candidate Category 1 Target Wave will afford to Takeda and its representatives reasonable access during normal business hours to Wave's personnel, records and data, offices, and laboratories, in each case, that relate to the Development of the applicable Candidate Category 1 Target and Candidate Category 1 Compounds, Candidate Category 1 Products, and Companion Diagnostics directed to such Candidate Category 1 Target.

3.3.4. **Extension of Option Exercise Period**. If any information is provided to Takeda following the receipt of an Option Notice for a Candidate Category 1 Target pursuant to (a) Section 3.3.2 (Incomplete Data Package) or (b) Section 3.3.3 (Due Diligence) within [***] Business Days after Takeda's receipt of the relevant Option Notice, and, in each case ((a)-(b)), such information is, in Takeda's reasonable discretion, material information not previously provided to Takeda and required to be provided as part of the Data Package for such Candidate Category 1 Target and its Lead Category 1 CP, then Takeda will have the right to elect upon written notice to Wave to extend the applicable Option Exercise Period for such Candidate Category 1 Target such that there are [***] additional days between Takeda's receipt of such material information and the expiration of such Option Exercise Period.

3.3.5. **Effect of Early Option Exercise**. The obligations of this Section 3.3 (Information Sharing) will not apply with respect to any Candidate Category 1 Target for which Takeda has exercised an Option prior to the date of the Completion of the POM Study for the Lead Category 1 CP directed to such Candidate Category 1 Target, except that Wave will deliver to Takeda a Data Package for such Candidate Category 1 Target (to the extent that such information was not previously provided by Wave to Takeda) reasonably promptly after the date on which Takeda exercises such Option and such information becomes available.

3.4. **Exercise of an Option.**

3.4.1. **Option Exercise Notice**. Takeda will exercise an Option, if at all, by delivering a completed Option Exercise Notice in respect of such Option to Wave at any time during the applicable Option Exercise Period for such Option.

3.4.2. Conversion.

3.4.2.1. **Conversion Notice**. On a Licensed Category 1 Target-by-Licensed Category 1 Target basis, within [***] Business Days after Takeda's delivery to Wave of an Option Exercise Notice for a Candidate Category 1 Target, upon written notice to Takeda (each, a "**Conversion Notice**"), Wave may elect, at its sole discretion, to convert the Candidate Category 1 Target that is the subject of such Option Exercise Notice into a Licensed Category 2 Target and to convert all Candidate Category 1 Compounds, Candidate Category 1 Products, and Companion Diagnostics directed to such Candidate Category 1 Target into Licensed Category 2 Compounds, Licensed Category 2 Products, and Companion Diagnostics directed to such Licensed Category 2 Target (as applicable). In the event that Wave delivers a Conversion Notice with respect to a Licensed Category 1 Target, then (without any further action by the Parties) upon the date of Wave's delivery of such Conversion Notice with respect to such Candidate Category 1 Target: (a) the Candidate Category 1 Target will convert to a Licensed Category 2 Target, (b) all Candidate Category 1 Compounds, Candidate Category 1 Products, and Companion Diagnostics directed to such Candidate Category 1 Target will convert into Licensed Category 2 Compounds, Licensed Category 2 Products, and Companion Diagnostics directed to such Licensed Category 2 Target, respectively, (c) the licenses set forth in Section 10.1 (Category 1 Development Program) and 10.2 (Licensed Category 1 Targets) will terminate with respect to such Candidate Category 1 Target and the corresponding Licensed Category 1 Target, (d) the licenses set forth in Section 10.3 (Licensed Category 2 Targets) will apply to such new Licensed Category 2 Target and to such new Licensed Category 2 Compounds, Licensed Category 2 Products, and Companion Diagnostics directed to such new Licensed Category 2 Target, and (e) the further Development and Commercialization of Licensed Category 2 Compounds, Licensed Category 2 Products, and Companion Diagnostics directed to such Licensed Category 2 Target will thereafter be governed by Sections 5.3 (Development Activities for Licensed Category 2 Targets) and Section 8 (Commercialization), respectively. [***].

3.4.2.2. **Conversion for Failure to Pay**. In addition, on a Licensed Category 1 Target-by-Licensed Category 1 Target basis, if Wave fails to fund its fifty percent (50%) share of applicable Eligible Development Expenses for any Licensed Category 1 Target in accordance with this Agreement and fails to cure such failure after written notice thereof from Takeda in accordance with Section 16.4.1.2 (Termination by Takeda), then, Takeda may, in its sole discretion, elect to deem such failure to pay as the delivery to Takeda of a Conversion Notice with respect to such Licensed Category 1 Target pursuant to this Section 3.4.2 (Conversion Notice) and thereafter (a) the Licensed Category 1 Target will convert to a Licensed Category 2 Target, (b) all Licensed Category 1 Compounds, Licensed Category 1 Products, and Companion Diagnostics directed to such Licensed Category 1 Target will convert into Licensed Category 2 Compounds, Licensed Category 2 Products, and Companion Diagnostics directed to such Licensed Category 2 Target, respectively, (c) the licenses set forth in Section 10.2 (Licensed

Category 1 Targets) will terminate with respect to such Licensed Category 1 Target, (d) the licenses set forth in Section 10.3 (Licensed Category 2 Targets) will apply to such new Licensed Category 2 Target and to such new Licensed Category 2 Compounds, Licensed Category 2 Products, and Companion Diagnostics directed to such new Licensed Category 2 Target, and (e) the further Development and Commercialization of Licensed Category 2 Compounds, Licensed Category 2 Products, and Companion Diagnostics directed to such Licensed Category 2 Target will thereafter be governed by Section 5.3 (Development Activities for Licensed Category 2 Targets) and Section 8 (Commercialization), respectively. Notwithstanding anything in this Agreement to the contrary, if Takeda elects to convert a Licensed Category 1 Target to a Licensed Category 2 Target in accordance with the previous sentence, then such conversion will be Takeda's sole and exclusive remedy with respect to the applicable funding failure that gave rise to Takeda having the right to make such election.

3.4.3. **Option Exercise Fee**. If Takeda delivers an Option Exercise Notice with respect to a Candidate Category 1 Target in accordance with this Agreement, then Takeda will pay the Option Exercise Fee with respect to such Option to Wave in accordance with Section 11.3.1 (Option Exercise Fee).

3.4.4. **Exercise of Options**. On the Licensed Target Date for the applicable Option, (a) the applicable Candidate Category 1 Target for which such Option was exercised will automatically become a "Licensed Category 1 Target" for all purposes under this Agreement, (b) the Lead Category 1 CP and all other Candidate Category 1 Compounds and Candidate Category 1 Products, in each case, that are directed to such Candidate Category 1 Target will automatically be "Licensed Category 1 Compounds" and "Licensed Category 1 Products," respectively, for all purposes under this Agreement, (c) Wave will automatically grant to Takeda the license set forth in Section 10.2.1 (License Grant to Takeda) and Takeda will automatically grant to Wave the license set forth in Section 10.2.2 (License Grant to Wave), and (d) all of the obligations of Wave and Takeda with respect to such Licensed Category 1 Target, including the payment obligations relating thereto, will become the binding obligations of the applicable Party in respect of such Licensed Category 1 Target and the Licensed Category 1 Compounds, Licensed Category 1 Products, and Companion Diagnostics directed thereto.

3.4.5. **Development and Commercialization Following Option Exercise**. Following the Licensed Target Date for an Option with respect to a Candidate Category 1 Target, the Development and Commercialization of all Licensed Category 1 Compounds, Licensed Category 1 Products, and Companion Diagnostics directed to the applicable Candidate Category 1 Target will thereafter be governed by Section 5 (Development) and Section 8 (Commercialization), respectively. For the avoidance of doubt, in no event will Wave have any responsibility to continue to perform any activities under a Candidate Category 1 Development Plan for a Candidate Category 1 Target following the conversion of such Candidate Category 1 Target to a Licensed Category 2 Target.

3.4.6. **Termination of Option**. On an Option-by-Option basis and Candidate Category 1 Target-by-Candidate Category 1 Target basis, if (a) Takeda does not deliver to Wave an Option Exercise Notice for such Candidate Category 1 Target during the applicable Option Exercise Period for such Option (which, for the HTT Target will be as described in Section 3.2 (HTT Target)), or (b) Takeda elects, in its sole discretion, to deliver written notice to Wave to terminate an Option with respect to such Candidate Category 1 Target prior to the expiration of the applicable Option Exercise Period, then, in either case ((a) or (b)), (i) Takeda's Option with respect to such Candidate Category 1 Target will expire, (ii) the Option Exercise Period with respect to such Candidate Category 1 Target will terminate effective as of the date of such written notice, (iii) each Party's rights and obligations under this Agreement (including the exclusivity set forth in Section 13.6.1 (Exclusivity)) with respect to such Candidate Category 1 Target and any Candidate Category 1 Compounds, Candidate Category 1 Products, and Companion Diagnostics directed to such Candidate Category 1 Target, in each case, will terminate effective as of the date of such written notice and such Candidate Category 1 Target will become a "Terminated Target" and the Category 1 Compounds, Candidate Category 1 Products, or Companion Diagnostics directed to such Candidate Category 1 Target will become "Reversion Products" for all Candidate Category 1 Targets excluding the HTT Target, for which each Party's rights and obligations (including such exclusivity) will only terminate if Takeda terminates the Option for the HTT Target in its entirety or upon the expiration of the Option Exercise Period for the HTT Target as described in Section 3.2 (HTT Target), (iv) the effects of termination set forth in Section 16.6 (Effects of Termination by Wave for Cause or Takeda for Convenience), as applicable, will apply to such Terminated Target and Reversion Products, and (v) Wave will thereafter be free to Exploit, alone or with one or more Third Parties, any compounds, products, or companion diagnostics directed to such Candidate Category 1 Target without any further obligation to Takeda.

3.4.7. **Delay for HSR Filing**. Notwithstanding Takeda's right to exercise an Option with respect to a particular Candidate Category 1 Target, in the event that, in Takeda's reasonable opinion, Takeda would be required to file any HSR Filing as a result of Takeda's exercise of an Option with respect to such Candidate Category 1 Target upon the date on which an Option Exercise Notice was delivered by Takeda to Wave for such Option in accordance with Section 3.4.1 (Option Exercise Notice), the effectiveness of such Option will be delayed beyond the date on which an Option Exercise Notice was delivered by Takeda to Wave for such Option in accordance with Section 3.4.1 (Option Exercise Notice) to the extent necessary to avoid a violation of the HSR Act until Takeda will have made such HSR Filing and to cause the occurrence of the HSR Conditions. Wave will provide Takeda with any information (including financial information) reasonably requested by Takeda for purposes of determining whether an HSR Filing is necessary or advisable. If Takeda determines that an HSR Filing is necessary or advisable, then each of Takeda and Wave will make or cause to be made such notifications and filings as promptly as practicable (but in any event within [***] Business Days of such determination). The Parties will reasonably cooperate with one another to the extent necessary in the preparation of any such HSR Filing. Each Party will be responsible for its own costs and expenses associated with such HSR Filing, and Takeda will be responsible for all premerger filing fees associated with any such HSR Filing. Each of Wave and Takeda hereby covenants and agrees to use reasonable efforts to secure, and not to take any action that will have the effect of delaying, impairing, or impeding, the occurrence of the HSR Conditions with

respect to the exercise of the Option. Notwithstanding the foregoing, nothing in this Section 3.4.7 (Delay for HSR Filing) will require either Party or such Party's Affiliates to (a) disclose to the other Party any information that is subject to obligations of confidentiality or non-use owed to Third Parties (nor will either Party be required to conduct joint meetings with any Governmental Authority in which such information might be shared with the other Party), or (b) to consent to the divestiture or other disposition of any of its or its Affiliates' assets or to consent to any other structural or conduct remedy.

4. SELECTION OF CATEGORY 2 TARGETS

4.1. **Proposed Category 2 Targets.** Subject to the limit set forth in Section 4.4 (Total Targets), during the Initial Licensed Category 2 Research Term, each Party may nominate one or more Targets for consideration as possible Licensed Category 2 Targets (each, a "**Proposed Category 2 Target**") by providing writing notice to the JSC, which notice will be substantially in the form attached as Schedule 4.1 (the "**Proposed Category 2 Target Nomination Notice**"). Subject to the dispute process set forth in Section 4.2 (Dispute Process), within **[***]** days after the date on which the JSC receives a Proposed Category 2 Target Nomination Notice, the JSC will review the Proposed Category 2 Target Nomination Notice and determine whether to approve such Proposed Category 2 Target as a Licensed Category 2 Target and following such approval by the JSC such Proposed Category 2 Target will be a "Licensed Category 2 Target" for purposes of this Agreement.

4.2. **Dispute Process.** If a Party believes that a Proposed Category 2 Target identified in a Proposed Category 2 Target Nomination Notice is [***].

4.3. **Licensed Category 2 Target Replacement.** At any time during the Initial Licensed Category 2 Research Term, either Party may propose to the JSC, subject to the dispute process set forth in Section 4.2 (Dispute Process), to replace a relevant, previously-selected Licensed Category 2 Target with a new Proposed Category 2 Target. If the JSC approves the replacement of such previously-selected Licensed Category 2 Target with a new Proposed Category 2 Target in accordance with this Section 4.3 (Licensed Category 2 Target Replacement) [***], then (a) such new Proposed Category 2 Target will be a Licensed Category 2 Target for purposes of this Agreement, (b) each Party's rights and obligations under this Agreement with respect to such replaced Licensed Category 2 Target and any Licensed Category 2 Compounds, Licensed Category 2 Products, and Companion Diagnostics directed to such replaced Licensed Category 2 Target (including the exclusivity set forth under Section 13.6.1 (Exclusivity)), in each case, will terminate, (c) such replaced Licensed Category 2 Target will be a "Terminated Target" and the applicable Licensed Category 2 Compounds, Licensed Category 2 Products, and Companion Diagnostics directed to such replaced Licensed Category 2 Target will be "Reversion Products," in each case, for purposes of this Agreement, (d) the effects of termination set forth in Section 16.6 (Effects of Termination by Wave for Cause or Takeda for Convenience), as applicable, will apply to such Terminated Target and Reversion Products, and (e) Wave will thereafter be free, alone or with one or more Third Parties, to Exploit any compounds, products, or companion diagnostics directed to such replaced Licensed Category 2 Target.

4.4. **Total Targets.** During the Initial Licensed Category 2 Research Term, the then current Licensed Category 2 Research Plans may not provide for the concurrent Development of Licensed Category 2 Compounds, Licensed Category 2 Products, or Companion Diagnostics directed to more than six (6) Licensed Category 2 Targets (the "**Licensed Category 2 Target Cap**"). A

Licensed Category 2 Target will cease to be under a current Licensed Category 2 Research Plan if (a) such Licensed Category 2 Target is replaced in accordance with Section 4.3 (Licensed Category 2 Target Replacement), (b) the JSC determines that a Technical Failure has occurred with respect to such Licensed Category 2 Target, (c) Takeda files an IND with respect to any Licensed Category 2 Product directed to such Licensed Category 2 Target; *provided, however*, that if Takeda requests that Wave perform additional Development activities for any Licensed Category 2 Compounds, Licensed Category 2 Products, or Companion Diagnostics directed to such Licensed Category 2 Target during the Initial Licensed Category 2 Research Term, then such Licensed Category 2 Target will continue to be counted towards the Licensed Category 2 Target Cap until the completion of such additional Development activities, or (d) such Licensed Category 2 Target becomes a Terminated Target for any other reason.

5. DEVELOPMENT

5.1. Development of Category 1 Targets.

5.1.1. **Category 1 Development Overview**. On a Category 1 Target-by- Category 1 Target basis, Wave will use Commercially Reasonable Efforts to Develop all Category 1 Compounds, Category 1 Products, and Companion Diagnostics directed to the applicable Category 1 Target in accordance with this Agreement, including the applicable Candidate Category 1 Development Plan or Licensed Category 1 Development Plan (each a "**Category 1 Development Program**"). Notwithstanding the foregoing, the Parties may agree upon certain activities that Takeda will conduct under a Category 1 Development Plan for a Category 1 Development Program. Each Category 1 Development Program will include the [***]. Each Party will conduct all Development of Category 1 Compounds, Category 1 Products, and Companion Diagnostics directed to the applicable Category 1 Target as part of the applicable Category 1 Development Program and in accordance with the applicable Category 1 Development Plan [***].

5.1.2. **Candidate Category 1 Development Plan**. An initial development plan for all activities to be conducted by the Parties with respect to Candidate Category 1 Compounds, Candidate Category 1 Products, and Companion Diagnostics directed to (a) the HTT Target is attached hereto as Schedule 5.1.2(a), [***], (b) C9orf72 is attached hereto as Schedule 5.1.2(b), and (c) ATXN3 will be prepared and agreed by the Parties following the Effective Date (each, a "**Candidate Category 1 Development Plan**"). Notwithstanding anything to the contrary set forth in this Agreement, the Candidate Category 1 Development Plan [***]. Each Candidate Category 1 Development Plan includes and each update thereto will include: (a) all Development, Manufacturing, and regulatory activities to be conducted by the Parties for Candidate Category 1 Compounds, Candidate Category 1 Products, and Companion Diagnostics directed to the applicable Candidate Category 1 Target through Completion of the POM Study for at least one (1) Candidate Category 1 Product directed to the applicable Candidate Category 1 Target; and (b) the allocation of responsibilities between Parties of the activities under such Candidate Category 1 Development Plan, together with a detailed budget for any activities allocated to Takeda that takes into account the expected costs of such activities, including a Calendar Quarter forecast and a long-range forecast. On at least an annual basis, the Development Lead will update each Candidate Category 1 Development Plan based on the currently available information and data and the JSC will review, discuss, and determine whether to approve any such update that is material.

5.1.3. **Licensed Category 1 Development Plan**. Upon the commencement of the Licensed Category 1 Development Term, on a Licensed Category 1 Target-by-Licensed Category 1 Target basis, the Licensed Category 1 Joint Team will prepare and the JSC will determine whether to approve, an individualized development plan for the further Development of the Licensed Category 1 Compounds, Licensed Category 1 Products, and Companion Diagnostics directed to such Licensed Category 1 Target (each a "**Licensed Category 1 Development Plan**"). Each Licensed Category 1 Development Plan and each update thereto will include (a) all Development, regulatory, and Manufacturing activities to be performed in furtherance of seeking Regulatory Approval of Licensed Category 1 Compounds, Licensed Category 1 Products, and Companion Diagnostics directed to such Licensed Category 1 Target in the Territory (which may include Development in China); (b) the allocation of responsibilities between the Parties of the activities set forth under such Licensed Category 1 Development Plan; (c) include a detailed budget for such activities in accordance with the format set forth on Schedule 5.1.3, that takes into account the expected costs of such activities; and (d) a [***] year forecast (such [***] year forecast to include a quarterly budget for the first year and an annual forecast for the remaining [***] years) (collectively, for each Licensed Category 1 Target, the "**Licensed Category 1 Development Budget**"). The Development Lead will prepare an initial draft of each Licensed Category 1 Development Plan, which draft will be included in the Data Package for the corresponding Candidate Category 1 Target provided by Wave to Takeda under Section 3.3.1 (Option Notice; Data Package). Within [***] days after the Licensed Target Date for such Licensed Category 1 Target, or as soon as reasonably practicable thereafter, the Licensed Category 1 Joint Team will review and update the Licensed Category 1 Development Plan for the Lead Category 1 LP and the JSC will determine whether to approve such updated Licensed Category 1 Development Plan. Thereafter, on an annual basis, the Licensed Category 1 Joint Team will review and update each Licensed Category 1 Development Plan (including the Licensed Category 1 Development Budget set forth therein) based on the currently available information and data and the JSC will review, discuss, and determine whether to approve any such update that is material.

5.1.4. **Development Diligence Obligations**.

5.1.4.1. **Candidate Category 1 Development Diligence**. On a Candidate Category 1 Target-by-Candidate Category 1 Target basis, during the Candidate Category 1 Development Term for a Candidate Category 1 Target, (a) Wave (itself or through its Affiliates or by permitted subcontracting in accordance with Section 5.6 (Third Parties)) will use [***], and (b) each Party (itself or through its Affiliates or by permitted subcontracting in accordance with Section 5.6 (Third Parties)) will use [***].

5.1.4.2. Licensed Category 1 Development Diligence. On a Licensed Category 1 Target-by-Licensed Category 1 Target basis, during the Licensed Category 1 Development Term for a Licensed Category 1 Target, (a) the Development Lead for such Category 1 Target (itself or through its Affiliates or by permitted subcontracting in accordance with Section 5.6 (Third Parties)) will use [***]; and (b) each Party (itself or through its Affiliates or by permitted subcontracting in accordance with Section 5.6 (Third Parties)) will use [***].

5.1.4.3. Breach of Licensed Category 1 Development Diligence Obligations. [***].

5.1.5. **Category 1 Development Expenses**. Wave will be responsible for [***] of all costs and expenses incurred by or on behalf of Wave in furtherance of the activities for which Wave is responsible under each Candidate Category 1 Development Plan. Takeda will be responsible for all FTE Costs incurred by or on behalf of Takeda in furtherance of those activities for which Takeda is responsible under each Candidate Category 1 Development Plan. Wave will reimburse Takeda in accordance with Section 11.5 (Other Amounts Payable) for any reasonable Out-of-Pocket Costs incurred by Takeda in furtherance of those activities for which Takeda is responsible under each Candidate Category 1 Development Plan in accordance with the budget set forth therein. The Parties will share the Eligible Development Expenses incurred in connection with the performance of Development activities for each Licensed Category 1 Compound, Licensed Category 1 Product, and Companion Diagnostic directed to each Licensed Category 1 Target as set forth in Section 11.3.2 (Eligible Development Expenses for Licensed Category 1 Targets).

5.1.6. **Category 1 Development Reports**. On a Category 1 Target-by-Category 1 Target basis, each Party will keep the JSC (and the Licensed Category 1 Joint Team, with respect to Licensed Category 1 Targets) informed regarding the progress of Development activities for the corresponding Category 1 Development Program during the Category 1 Development Term. In addition, the Development Lead will provide to the JSC and the Licensed Category 1 Joint Team (if applicable) reasonably in advance of each meeting of the JSC during the Category 1 Development Term a written report, in a format agreed upon by the JSC, reviewing results, progress against timelines in the applicable Category 1 Development Plan, and Development activities planned to be undertaken for all Category 1 Compounds, Category 1 Products, and Companion Diagnostics directed to the applicable Category 1 Target, including, for each Category 1 Development Program, a reasonable summary of results, information, and data generated from Clinical Studies for all such Category 1 Compounds, Category 1 Products, and Companion Diagnostics directed to the applicable Category 1 Target, any activities planned with respect to Development going forward under such Category 1 Development Program (including, for example, updates regarding regulatory matters and Development activities for the next Calendar Quarter), challenges anticipated, and updates regarding intellectual property issues (such report, a "**Category 1 Development Report**"). During the Category 1 Development Term, each Party will promptly share with the other Party all other material developments and information that it comes to possess relating to the Development of any Category 1 Compounds, Category 1 Products, or Companion Diagnostics directed to such Category 1 Target, including Safety Concerns for Category 1 Compounds or Category 1 Products, or Companion Diagnostics directed to such Category 1 Target and any additional information regarding such Development activities with respect to Category 1 Compounds, Category 1 Products, or Companion Diagnostics directed to such Category 1 Target as reasonably requested by the other Party through the JSC and the Licensed Category 1 Joint Team (if applicable) from time to time to the extent and in the form readily available to such Party and transferable to the other Party.

5.1.7. **Licensed Category 1 Transition Plan**. In the event that the JSC determines that the Development Lead for any Licensed Category 1 Target will transition from one Party to the other Party, then no later than [***] days following the date of the JSC's decision, the Licensed Category 1 Joint Team will prepare a plan for the transition from such Party to the other Party of all further Development and regulatory activities for Licensed Category 1 Compounds, Licensed Category 1 Products, and Companion Diagnostics directed to the applicable Licensed Category 1 Target, including any required technology transfer (for each Licensed Category 1 Target, a "**Licensed Category 1 Transition Plan**"). Each Licensed Category 1 Transition Plan will include (a) the assignment from the applicable Party to the other Party of all INDs, Regulatory Approvals, Regulatory Materials, and other regulatory documentation related to Licensed Category 1 Compounds, Licensed Category 1 Products, and Companion Diagnostics directed to the applicable Licensed Category 1 Target, and (b) a detailed budget for such activities, that takes into account the expected costs of such activities, together with a forecast for each Calendar Quarter and a long range forecast (for each Licensed Category 1 Target, the "**Licensed Category 1 Transition Budget**"). The JSC will review, discuss, and determine whether to approve each such Licensed Category 1 Transition Plan. Each Party will use Commercially Reasonable Efforts to complete the activities for which it is responsible under each Licensed Category 1 Transition Plan.

5.2. Research Activities for Licensed Category 2 Targets.

5.2.1. **Licensed Category 2 Research Overview**. On a Licensed Category 2 Target-by-Licensed Category 2 Target basis, during the Licensed Category 2 Research Term for each Licensed Category 2 Target, unless otherwise agreed by the JSC, Wave will lead the pre-clinical and non-clinical Development for all Licensed Category 2 Compounds, Licensed Category 2 Products, and Companion Diagnostics directed to the applicable Licensed Category 2 Target in accordance with this Agreement, including the applicable Licensed Category 2 Research Plan (each, a "**Licensed Category 2 Research Program**"). Notwithstanding the foregoing, the Parties may agree upon certain activities that Takeda will conduct under a Licensed Category 2 Research Plan for a Licensed Category 2 Program. Each Licensed Category 2 Research Program will include the performance of all activities reasonably necessary to Develop at [***] directed to the corresponding Licensed Category 2 Target through [***]. Each Party will conduct all Development of Licensed Category 2 Compounds, Licensed Category 2 Products, and Companion Diagnostics directed to the applicable Licensed Category 2 Target as part of the applicable Licensed Category 2 Research Program and in accordance with the applicable Licensed Category 2 Research Plan and will not conduct any Development activities for such Licensed Category 2 Compounds, Licensed Category 2 Products, or Companion Diagnostics outside of the applicable Licensed Category 2 Research Program or other than as set forth under such Licensed Category 2 Research Plan.

5.2.2. **Licensed Category 2 Research Term**. The Parties will perform Development activities under the Licensed Category 2 Research Plans only during the Initial Licensed Category 2 Research Term, unless during the [***] day period prior to the expiration of the Initial Licensed Category 2 Research Term Takeda requests in writing an extension of such initial term for any then-ongoing Licensed Category 2 Research Program for which one or both Parties is pursuing activities under the applicable

Licensed Category 2 Research Plan, which written request will specify the Licensed Category 2 Research Plan under which Takeda wishes to extend activities and the time period for which Takeda wishes to extend the performance of such activities (the "**Category 2 Target Specific Extension**"), *provided that* such time period may not exceed a period of two (2) additional years following the Initial Licensed Category 2 Research Term. If Takeda so requests during such sixty (60) day period, then Wave will and Takeda may (to the extent allocated to Takeda in any applicable Licensed Category 2 Research Plan) continue to perform Development activities for such specified Licensed Category 2 Research Programs under the applicable Licensed Category 2 Research Plans during the Category 2 Target Specific Extension.

5.2.3. **Licensed Category 2 Research Plans**. On a Licensed Category 2 Target-by-Licensed Category 2 Target basis, no later than thirty (30) days after the JSC's approval of a Proposed Category 2 Target as a Licensed Category 2 Target in accordance with Section 4.1 (Proposed Category 2 Targets), the applicable Development Lead will prepare, and the JSC will determine whether to approve, an individualized research plan for all Development activities to be conducted by the Parties for Licensed Category 2 Compounds, Licensed Category 2 Products, and Companion Diagnostics directed to each Licensed Category 2 Target during the Licensed Category 2 Research Term (each a "**Licensed Category 2 Research Plan**"). Each Licensed Category 2 Research Plan and each update thereto will include: (a) all Development, Manufacturing, and regulatory activities (if any) to be performed by the Parties through the Completion of the IND-Enabling Studies for the first Major Market Country for Licensed Category 2 Compound and Licensed Category 2 Products directed to such Licensed Category 2 Target; (b) the allocation of responsibilities between Parties of the activities set forth under such Licensed Category 2 Research Plan; (c) a detailed budget for such activities that takes into account the expected costs of such activities; (d) a three (3) year forecast (such three (3) year forecast to include a quarterly budget for the first year and an annual forecast for the remaining two (2) years) (collectively, for each Licensed Category 2 Target, the "**Licensed Category 2 Research Budget**"); and (e) identified criteria for the advancement of Licensed Category 2 Compounds, Licensed Category 2 Products, and Companion Diagnostics directed to each Licensed Category 2 Target into the next phase of Development, including the criteria for the commencement of any Clinical Study of any Licensed Category 2 Product. On an annual basis, the Category 2 Research Committee will review and update each Licensed Category 2 Research Plan (including the Licensed Category 2 Research Budget) based on the currently available information and data and the JSC will review, discuss, and determine whether to approve any such update that is material. The Licensed Category 2 Research Budget will be prepared by [***]. The Parties agree that, notwithstanding anything in this Agreement to the contrary, [***]. In addition, Wave will not be required to perform any work that is not contemplated by a Licensed Category 2 Research Plan or that would impose any additional financial or other resource obligations beyond the scope of those required to perform the then-current Licensed Category 2 Research Plan, unless such additional scientific work is reflected in an amendment to the Licensed Category 2 Research Plan (including an updated Licensed Category 2 Research Budget) agreed by each Party and Wave's FTE Costs and Out-of-Pocket Costs therefor are funded by Takeda.

5.2.4. Research Diligence Obligations.

5.2.4.1. Licensed Category 2 Research Diligence. On a Licensed Category 2 Target-by-Licensed Category 2 Target basis, during the Licensed Category 2 Research Term, each Party (itself or through its Affiliates or by permitted subcontracting in accordance with Section 5.6 (Third Parties)) will use [***]. Without limiting the generality of the foregoing, during the Licensed Category 2 Research Term, the applicable Development Lead will use [***].

5.2.4.2. Breach of Licensed Category 2 Research Diligence Obligations. [***].

5.2.5. Licensed Category 2 Research Expenses. During each twelve (12) month period of the Licensed Category 2 Research Term, Wave will carry forward any unspent amounts paid by Takeda for activities under the Licensed Category 2 Research Plans during such twelve (12) month period and apply such amounts against Licensed Category 2 Research Expenses incurred in the next twelve (12) month period before Takeda is obligated to reimburse Wave for excess expenditures in such twelve (12) month period. Wave will not be obligated to reimburse Takeda for any unspent amounts remaining at the end of the Licensed Category 2 Research Term that have been paid by Takeda for activities under the Licensed Category 2 Research Plans for Licensed Category 2 Targets.

5.2.6. Licensed Category 2 Research Reports. On a Licensed Category 2 Target-by-Licensed Category 2 Target basis, each Party will keep the JSC (and the Category 2 Research Committee during the Licensed Category 2 Research Term) informed regarding the progress of Development activities for the corresponding Licensed Category 2 Research Program during the Licensed Category 2 Research Term. In addition, the Development Lead will provide to the JSC and the Category 2 Research Committee (if applicable) reasonably in advance of each meeting of the JSC during the Licensed Category 2 Research Term a written report reviewing results, progress against timelines in the applicable Licensed Category 2 Research Plan, and Development activities planned to be undertaken for all Licensed Category 2 Compounds, Licensed Category 2 Products, and Companion Diagnostics directed to the applicable Licensed Category 2 Target, a reasonable summary of results, information, and data generated from non-clinical studies for all such Licensed Category 2 Compounds, Licensed Category 2 Products, and Companion Diagnostics directed to the applicable Category 1 Target, any activities planned with respect to Development going forward under such Licensed Category 2 Research Program (including, for example, updates regarding Development activities for the next Calendar Quarter), challenges anticipated, and updates regarding intellectual property issues (such report, a "**Licensed Category 2 Research Report**"). During the Licensed Category 2 Research Term, each Party will promptly share with the other Party all other material developments and information that it comes to possess relating to the Development of any Licensed Category 2 Compounds, Licensed Category 2 Products, or Companion Diagnostics directed to such Licensed Category 2 Target, including Safety Concerns for Licensed Category 2 Compounds, Licensed Category 2 Products, or Companion Diagnostics directed to such Licensed Category 2 Target and any additional information regarding such Development activities with respect to Licensed Category 2 Compounds, Licensed Category 2 Products, or Companion Diagnostics

directed to such Licensed Category 2 Target as reasonably requested by the other Party through the JSC and the Category 2 Research Committee (if applicable) from time to time to the extent and in the form readily available to such Party and transferable to the other Party.

5.3. Development Activities for Licensed Category 2 Targets.

5.3.1. **Licensed Category 2 Development Overview**. On a Licensed Category 2 Target-by-Licensed Category 2 Target basis, during the Licensed Category 2 Development Term, Takeda will Develop the Licensed Category 2 Compounds, Licensed Category 2 Products, and Companion Diagnostics directed to such Licensed Category 2 Target in the Field in the Territory in accordance with this Agreement, including the applicable Licensed Category 2 Development Plan (the "**Licensed Category 2 Development Program**").

5.3.2. **Licensed Category 2 Transition Plan**. On a Licensed Category 2 Target-by-Licensed Category 2 Target basis, no later than sixty (60) days prior to the anticipated completion of activities under each Licensed Category 2 Research Plan for a Licensed Category 2 Target, Wave will prepare a draft plan for the transition from Wave to Takeda of all further Development and regulatory activities for Licensed Category 2 Compounds, Licensed Category 2 Products, and Companion Diagnostics directed to the applicable Licensed Category 2 Target, including a draft IND for the first Licensed Category 2 Product directed to such Licensed Category 2 Target for the first Major Market Country (a "**Lead Category 2 LP**") and any required technology transfer (for each such Licensed Category 2 Target, such plan and IND, collectively, a "**Licensed Category 2 Transition Plan**"). Each Licensed Category 2 Transition Plan will include (a) the plan and timeline for the assignment from Wave to Takeda of all Regulatory Materials and other regulatory documentation (if any) related to Licensed Category 2 Compounds, Licensed Category 2 Products, and Companion Diagnostics directed to the applicable Licensed Category 2 Target, and (b) a detailed budget for such activities, that takes into account the expected costs of such activities, including a forecast for each Calendar Quarter and a long range forecast (for each Licensed Category 2 Target, the "**Licensed Category 2 Transition Budget**"). The JSC will review, discuss, and determine whether to approve, each such Licensed Category 2 Transition Plan. The Parties understand that a Licensed Category 2 Transition Plan, along with the Parties' obligations thereunder, will commence after the Completion of the IND-Enabling Studies for the Licensed Category 2 Compounds and Licensed Category 2 Products directed to such Licensed Category 2 Target for the first Major Market Country, and such obligations will continue beyond the transfer to Takeda of Regulatory Lead with respect thereto. The Parties agree that, notwithstanding anything in this Agreement to the contrary, Wave will not be required to perform activities under a Licensed Category 2 Transition Plan unless Takeda fully funds Wave's activities in accordance with and to the extent set forth in Section 5.3.5 (Licensed Category 2 Development Expenses) other than any costs or expenses of Wave or its Affiliates to the extent caused by Wave's breach of this Agreement.

5.3.3. **Licensed Category 2 Development Plan**. On a Licensed Category 2 Target-by-Licensed Category 2 Target basis, promptly following commencement of the Licensed Category 2 Development Term for such Licensed Category 2 Target, Takeda will prepare and the JSC will review and discuss an individualized development plan for the Development of Licensed Category 2 Compounds, Licensed Category 2 Products, and Companion Diagnostics directed to such Licensed Category 2 Target (each a "**Licensed Category 2 Development Plan**"). Each Licensed Category 2 Development Plan and each update thereto will include (a) all Development, regulatory, and Manufacturing activities to be performed in furtherance of seeking Regulatory Approval of Licensed Category 2 Compounds, Licensed Category 2 Products and Companion Diagnostics directed to such Licensed Category 2 Target in the Territory (which may include Development in China), (b) the allocation of responsibilities between the Parties of the activities set forth under such Licensed Category 2 Development Plan, including any preclinical or nonclinical studies to be performed by Wave during the Licensed Category 2 Development Term, and (c) a detailed budget for such activities to be performed by Wave. The Parties agree that, notwithstanding anything in this Agreement to the contrary, Wave will not be required to perform activities under a Licensed Category 2 Development Plan unless Takeda fully funds Wave's activities in accordance with and to the extent set forth in Section 5.3.5 (Licensed Category 2 Development Expenses) other than any costs or expenses of Wave or its Affiliates to the extent caused by Wave's breach of this Agreement. On at least an annual basis or more frequently as necessary, Takeda will update each Licensed Category 2 Development Plan based on the currently available information and data and provide a copy to the JSC for informational purposes only.

5.3.4. **Licensed Category 2 Development Diligence**. On a Licensed Category 2 Target-by-Licensed Category 2 Target basis, Takeda (itself or through its Affiliates or Sublicensees) will use [***]. In addition, each Party (itself or through its Affiliates or by permitted subcontracting in accordance with Section 5.6 (Third Parties)) will use [***].

5.3.5. **Licensed Category 2 Development Expenses**. Takeda will be solely responsible for any documented FTE Costs and Out-of-Pocket Costs either Party incurs in furtherance of a Transition Plan for a Licensed Category 2 Target and will reimburse Wave for any such costs in accordance with Section 11.5 (Other Amounts Payable). In addition, during the Licensed Category 2 Development Term, (a) Takeda will be responsible for [***] it incurs in the performance of Development activities related to Licensed Category 2 Compounds, Licensed Category 2 Products, and Companion Diagnostics directed to any Licensed Category 2 Target, and (b) Takeda will be solely responsible for any documented FTE Costs and Out-of-Pocket Costs that Wave incurs in furtherance of a Licensed Category 2 Development Plan for a Licensed Category 2 Target within the applicable budget *plus* Applicable Overruns (other than as a result of Wave's breach of this Agreement) and will reimburse Wave for any such costs in accordance with Section 11.5 (Other Amounts Payable) to the extent such costs and overruns exceed Takeda's obligations under Section 11.4.1.1 (Initial Licensed Category 2 Research Term).

5.3.6. **Licensed Category 2 Development Reports**. On a Licensed Category 2 Target-by-Licensed Category 2 Target basis, Takeda will keep the JSC informed regarding the progress of Development activities for the corresponding Licensed

Category 2 Development Program during the Licensed Category 2 Development Term. In addition, Takeda will provide to the JSC reasonably in advance of each meeting of the JSC during the Licensed Category 2 Development Term a written report reviewing results, progress against timelines in the applicable Licensed Category 2 Development Plan, and Development activities planned to be undertaken for all Licensed Category 2 Compounds, Licensed Category 2 Products, and Companion Diagnostics directed to the applicable Licensed Category 2 Target, including, for each Licensed Category 2 Development Program, a reasonable summary of results, information, and data generated from Clinical Studies for all such Licensed Category 2 Compounds, Licensed Category 2 Products, and Companion Diagnostics directed to the applicable Licensed Category 2 Target, any activities planned with respect to Development going forward under such Licensed Category 2 Development Program (including, for example, updates regarding regulatory matters and Development activities for the next Calendar Quarter) and challenges anticipated (such report, a "**Licensed Category 2 Development Report**"). During the Licensed Category 2 Development Term, each Party will promptly share with the other Party all other material developments and information that it comes to possess relating to the Development of any Licensed Category 2 Compounds, Licensed Category 2 Products, or Companion Diagnostics directed to such Licensed Category 2 Target, including Safety Concerns for Licensed Category 2 Compounds or Licensed Category 2 Products, or Companion Diagnostics directed to such Licensed Category 2 Target and any additional information regarding such Development activities with respect to Licensed Category 2 Compounds, Licensed Category 2 Products, or Companion Diagnostics directed to such Licensed Category 2 Target as reasonably requested by the other Party through the JSC from time to time to the extent and in the form readily available to such Party and transferable to the other Party. The Parties will share any Safety Concerns with respect to such Licensed Category 2 Compounds and Licensed Category 2 Products in accordance with the SDEA.

5.3.7. **Wave Personnel**. On a Licensed Category 2 Target-by-Licensed Category 2 Target basis, during the period commencing after the completion of the activities under the Licensed Category 2 Transition Plan for a Licensed Category 2 Target and ending upon Regulatory Approval in each Major Market Country of the Lead Category 2 LP directed to such Licensed Category 2 Target, Takeda may request that Wave reasonably make available certain of its employees for consultation regarding the Development of or regulatory activities relating to Licensed Category 2 Compounds, Licensed Category 2 Products, or Companion Diagnostics directed to such Licensed Category 2 Target. [***].

5.4. **Development Lead Responsibilities.** For each Collaboration Compound, Collaboration Product, and Companion Diagnostic for which such Party is the Development Lead, such Development Lead will be principally responsible for overseeing the execution of the applicable Development Plan, including researching and developing related Companion Diagnostics, preparing Clinical Study designs and protocols, sponsoring Clinical Studies, engaging CROs, and being primarily responsible for managing activities at Clinical Study sites. Notwithstanding the foregoing, the non-Development Lead with respect to a Collaboration Target may conduct Development activities for Collaboration Compounds, Collaboration Products, and Companion Diagnostics directed to such Collaboration Target to the extent set forth in, and in accordance with, the applicable Development Plan for such Collaboration Target.

5.5. **Scientific Records.** Each Party will maintain scientific records in sufficient detail and in good scientific manner appropriate for patent and regulatory purposes, and in compliance with GLP, cGMP, and GCP with respect to activities intended to be submitted in regulatory filings (including INDs), all of which records will fully and accurately reflect all work done and results achieved in the performance of the Development activities and Clinical Studies by or on behalf of such Party with respect to Collaboration Compounds, Collaboration Products, and Companion Diagnostics directed to each Collaboration Target.

5.6. **Third Parties.** Each Party may utilize the services of Third Parties to perform its Development activities under this Section 5 (Development); *provided that* (a) such Party will require that each such Third Party operates in a manner consistent with the terms of this Agreement, and (b) such Party will remain at all times fully liable for its respective responsibilities under this Agreement and for the acts and omissions of such Third Parties under this Agreement. Each Party will require that any Third Party agreement utilized to perform any Development activities under this Section 5.6 (Third Parties) is engaged by such Party pursuant to an agreement that (i) includes confidentiality and non-use provisions that are no less stringent than those set forth in Section 12.1 (Nondisclosure and Non-Use Obligations) (but of duration customary in confidentiality agreements entered into for a similar purpose); and (ii) assigns to such Party ownership of, or grants to such Party an irrevocable, perpetual, fully-paid, worldwide, fully sublicensable license (through multiple tiers) under and to, any Know-How or Patents that are developed by such Third Party in the performance of its obligations under such agreement and are reasonably necessary or reasonably useful to Exploit Collaboration Compounds, Collaboration Products, or Companion Diagnostics directed to the applicable Collaboration Target in the Field in the Territory (which license must be exclusive with respect to any Collaboration Compound, Collaboration Product, or Companion Diagnostic directed to any Collaboration Target, but may be non-exclusive with respect to such Third Party's background technology and improvements thereof to the extent incorporated in any Collaboration Compound, Collaboration Product, or Companion Diagnostic directed to any Collaboration Target). Each Party will be solely responsible for direction of and communications with each such Third Party, but such Party will provide the other Party through the JSC a reasonably detailed updates regarding any such activities from time to time.

5.7. **Technical Failure.**

5.7.1. **Effects of Technical Failure**. On a Collaboration Target-by-Collaboration Target basis, if the JSC determines that a Technical Failure has occurred with respect to such Collaboration Target during the Candidate Category 1 Development Term (with respect to Candidate Category 1 Targets) or during the Licensed Category 2 Research Term (with respect to Licensed Category 2 Targets), [***] (a) Takeda's Option with respect to such Candidate Category 1 Target will expire, (b) the Option Exercise Period with respect to such Candidate Category 1 Target will terminate effective as of the date of such written notice, (c) each Party's rights and obligations under this Agreement with respect to such Collaboration Target and any Collaboration Compounds, Collaboration Products, or Companion Diagnostics directed to such Collaboration Target, in each case, will terminate effective as of the date the JSC determines that a Technical Failure has occurred with respect to such Collaboration Target and thereafter such Collaboration Target will become a "Terminated Target" and the Collaboration Compounds, Collaboration Products, or Companion Diagnostics directed to such Collaboration Target will become "Reversion Products" (including the exclusivity provisions set forth in Section 13.6.1 (Exclusivity)), (d) the effects of

termination set forth in Section 16.6 (Effects of Termination by Wave for Cause or Takeda for Convenience), as applicable, will apply to such Terminated Target and Reversion Products, and (e) Wave will thereafter be free to directly, or indirectly through one or more Third Parties, Exploit any compounds, products, or companion diagnostics directed to such Collaboration Target without any further obligation to Takeda.

5.7.2. [***].

5.7.3. [***].

5.8. [***].

6. REGULATORY MATTERS

6.1. **Regulatory Lead Responsibilities.** Subject to Section 8.6 (Recalls, Market Withdrawals, or Corrective Actions), the Regulatory Lead will be solely responsible for all regulatory matters in the Territory relating to the Collaboration Compounds, Collaboration Products, and Companion Diagnostics for which such Party is the Regulatory Lead. The Regulatory Lead will own all INDs, NDA, Regulatory Approvals, Regulatory Materials, and related regulatory documents in the Territory with respect to such Collaboration Compounds, Collaboration Products, and Companion Diagnostics (in each case, as applicable), including any drug master files maintained by such Regulatory Lead solely with respect thereto in the Territory. Upon approval of the JSC, the role of Regulatory Lead may transition from one Party to the other Party.

6.2. **Assignment of Regulatory Materials.** On a Licensed Target-by-Licensed Target basis, promptly following transition to Takeda of Regulatory Lead with respect to a Licensed Target and all Licensed Compounds, Licensed Products, and Companion Diagnostics directed to such Licensed Target (for clarity, including any HTT Compounds, HTT Products, and any Companion Diagnostics related thereto): (a) within sixty (60) days following the such transition to Takeda of Regulatory Lead Wave will send a letter to the each Regulatory Authority in the Territory to transfer and assign to Takeda Wave's entire right, title, and interest in and to all Regulatory Approvals with respect to all such Licensed Compounds, Licensed Products, and Companion Diagnostics directed to such Licensed Target, and (b) within thirty (30) days following such transition to Takeda, (i) Wave will transfer and assign to Takeda Wave's entire right, title, and interest in and to all INDs, NDAs, other Regulatory Materials, and other regulatory documentation in the Territory with respect to such all Licensed Compounds, Licensed Products, and Companion Diagnostics directed to such Licensed Target that is in the possession and control of Wave, excluding any drug master files maintained by Wave or a Third Party solely with respect thereto, and (ii) the Parties will complete all other transition activities within thirty (30) days of such transition to Takeda of Regulatory Lead.

6.3. **Drug Master Files.** If Takeda does not have access to or rights to cross-reference any drug master files maintained by any Third Party (including any contract manufacturer) pursuant to Section 6.7 (Right of Reference) reasonably sufficient to permit Takeda to exercise its rights and comply with its regulatory obligations, in each case, in connection with the Development, Manufacture, and Commercialization of Collaboration Compounds, Collaboration Products, and Companion Diagnostics directed to any Collaboration Target under this Agreement, then, (a) with respect to any agreement between Wave and any such Third Party that exists as of the Effective Date, Wave will use Commercially Reasonable Efforts to secure for Takeda such reasonably

sufficient access to or rights to cross-reference any such drug master files maintained by such Third Party, and (b) with respect to any agreement between Wave and any such Third Party that is entered into on or after the Effective Date, Wave will secure for Takeda such reasonably sufficient access to or rights to cross-reference any such drug master files maintained by such Third Party.

6.4. **Communications with Regulatory Authorities.** Each Regulatory Lead will provide the JSC for its review and discussion with a brief description in English of the principal issues raised in each Material Communication with Regulatory Authorities with respect to any Collaboration Compound, Collaboration Product, or Companion Diagnostic directed to a Collaboration Target for which such Party is the Regulatory Lead. The Regulatory Lead will provide such descriptions of such Material Communications to the JSC within fifteen (15) Business Days after receipt thereof, if related to any Collaboration Compound, Collaboration Product, or Companion Diagnostic directed to a Category 1 Target, and as part of the quarterly updates regarding Development activities described in Section 5.2.6 (Licensed Category 2 Research Reports) or Section 5.3.6 (Licensed Category 2 Development Reports), as applicable, if related to any Collaboration Compound, Collaboration Product, or Companion Diagnostic directed to any Licensed Category 2 Target. [***].

6.5. **Regulatory Meetings.** Each Regulatory Lead will provide the other Party with reasonable advance notice of all meetings with the Governmental Authorities in the Territory pertaining to each Collaboration Compound, Collaboration Product, or Companion Diagnostic directed to each Collaboration Target for which such Party is the Regulatory Lead, or with as much advance notice as practicable under the circumstances. [***].

6.6. **Submissions.** Each Regulatory Lead will provide the other Party, through the JSC, with written notice of each of the following events with regard to each Collaboration Compound, Collaboration Product, or Companion Diagnostic directed to each Collaboration Target for which such Party is the Regulatory Lead (a) within a reasonable period of time following the occurrence thereof (but in any event no later than thirty (30) days thereafter), to the extent notice was not previously provided: (i) the submission of any filings or applications for Regulatory Approval (other than INDs) of such Collaboration Compounds, Collaboration Products, or Companion Diagnostics in the Territory to any Regulatory Authority; and (ii) receipt or denial of Regulatory Approval for any such filings or applications for Collaboration Products or Companion Diagnostics in the Territory; and (b) on a quarterly basis, (i) all IND materials (as well as orphan drug applications and designations) that were filed for such Collaboration Compounds, Collaboration Products, or Companion Diagnostics during such preceding Calendar Quarter and (ii) a summary of all INDs anticipated to be filed within the upcoming Calendar Quarter, in each case ((i) and (ii)), will be provided electronically; *provided*, *however*, that each Party will inform the other Party of such event under (a) or (b) prior to public disclosure of such event by such Party. [***].

6.7. **Right of Reference.** Each Party hereby grants to the other Party, and at the request of the other Party will grant to the other Party's Related Parties, a "Right of Reference," as that term is defined in 21 C.F.R. § 314.3(b) (or any successor rule or analogous Law recognized outside of the United States), to, and a right to copy, access, and otherwise use, all information and data (including all CMC information as well as data made, collected, or otherwise generated in the conduct of any Clinical Studies, or early access/named patient programs for the Collaboration Compounds, Collaboration Products, or Companion Diagnostics directed to a Collaboration Target included in or used in support of any regulatory filing, Regulatory Approval, drug master

file or other regulatory documentation (including orphan drug applications and designations) Controlled by such Party or its Related Parties that relates to any Collaboration Compound, Collaboration Product, or Companion Diagnostic directed to a Collaboration Target solely for the purpose or obtaining or maintaining any Regulatory Approval of a Collaboration Product or Companion Diagnostic directed to a Collaboration Target. In addition, upon the reasonable request of the other Party (on behalf of itself or a Sublicensee), each Party will provide a signed statement to this effect, if requested by the other Party, in accordance with 21 C.F.R. § 314.50(g)(3) (or any successor or analogous Law outside of the United States) that the other Party may rely on, and the Regulatory Authority may access, in support of the other Party's application for Regulatory Approval in its Territory, any underlying raw data or information submitted by such Party to the Regulatory Authority with respect to any regulatory filing, Regulatory Approval, drug master file, or other regulatory documentation (including orphan drug applications and designations) Controlled by such Party or its Related Parties that relates to any Collaboration Compound, Collaboration Product, or Companion Diagnostics directed to a Collaboration Target. In addition, upon reasonable request of either Party (on behalf of itself or a Sublicensee), the other Party will obtain and provide to the requesting Party certificates or other formal or official attestations concerning the regulatory status of the Collaboration Compounds, Collaboration Products, or Companion Diagnostics directed to a Collaboration Target in the Territory (e.g., Certificates of Free Sale, Certificates for Export, Certificates to Foreign Governments), in each case, as is reasonably necessary for the requesting Party to exercise its rights under this Agreement. Notwithstanding anything in this Agreement to the contrary other than for Safety Concerns, unless otherwise agreed by the Parties, neither Party will withdraw or inactivate any regulatory filing that the other Party references or otherwise uses pursuant to this Section 6.7 (Right of Reference). [***].

6.8. Pharmacovigilance for Collaboration Targets. The Parties will cooperate with regard to the reporting and handling of safety information involving Collaboration Compounds, Collaboration Products, and Companion Diagnostics directed to any Collaboration Target, in each case, in accordance with the applicable regulatory Laws and regulations on pharmacovigilance and clinical safety. [***] the Parties will negotiate in good faith and enter into a SDEA, which will define the pharmacovigilance responsibilities of the Parties and include safety data exchange procedures governing the exchange of information affecting the class (*e.g.*, Serious Adverse Events, emerging safety issues) to enable each Party (and their respective Related Parties, if any) to comply with all of its legal and regulatory obligations related to such Collaboration Compounds, Collaboration Products, and Companion Diagnostics directed to any Collaboration Target. Wave will own and maintain the global safety database for all Candidate Category 1 Compounds, Candidate Category 1 Products, and Companion Diagnostics directed to any Candidate Category 1 Target; *provided that* Takeda will have the right to review and have access to such global safety database upon request. On a Licensed Target-by-Licensed Target basis, promptly following the date on which Takeda becomes the Regulatory Lead with respect to such Licensed Target, Wave will transition to Takeda, and Takeda will thereafter own and maintain, the global safety database for all Licensed Compounds, Licensed Products, and Companion Diagnostics directed to such Licensed Target.

6.9. Costs of Regulatory Affairs. [***].

7. MANUFACTURING

7.1. **Manufacturing Lead Responsibilities.** The Manufacturing Lead will be solely responsible for, and will, Manufacture (or have Manufactured) all Collaboration Compounds, Collaboration Products, any Companion Diagnostics directed to each Collaboration Target in sufficient quantities as is necessary for completion of the activities contemplated under this Agreement, including (a) for the performance of all Development activities, including all Clinical Studies, set forth for in any then-current Development Plan, and (b) for Commercialization in the Territory as set forth in any then-current Commercialization Plan. [***].

7.2. **Supply to Takeda.** For all Collaboration Compounds, Collaboration Products, and Companion Diagnostics directed to any Collaboration Target for which Wave is the Manufacturing Lead, Wave will supply such Collaboration Compounds, Collaboration Products, and Companion Diagnostics (a) for Development purposes, in accordance with the Clinical Supply Agreement to be entered into in accordance with Section 7.7 (Manufacturing and Supply Agreements), and (b) for Commercialization purposes, in accordance with the Commercial Supply Agreement to be entered into in accordance with Section 7.7 (Manufacturing and Supply Agreements).

7.3. **Transition to Takeda.** If, with respect to a particular Collaboration Target and the Collaboration Compounds, Collaboration Products, and Companion Diagnostics directed thereto (a) the JSC determines that Takeda will be the Manufacturing Lead for such Collaboration Target, then Takeda will automatically be the Manufacturing Lead, or (b) there is a Supply Failure with respect to any Collaboration Compounds, Collaboration Products, or Companion Diagnostics directed to such Collaboration Target, then Takeda will have the right to become the Manufacturing Lead following such Supply Failure, in each case ((a) and (b)) with respect to such Collaboration Compounds, Collaboration Products, and Companion Diagnostics directed to such Collaboration Target and will have the right to Manufacture or have Manufactured such Collaboration Compounds, Collaboration Products, and Companion Diagnostics directed to such Collaboration Target, subject to Wave's prior consent (not to be unreasonably withheld) to any Third Party contractor manufacturer that Takeda wishes to engage for such Manufacture.

7.4. **Costs and Expenses of Manufacturing.** The Manufacturing Lead will Manufacture (or have Manufactured) all Candidate Category 1 Compounds, Candidate Category 1 Products, and Companion Diagnostics directed to each Candidate Category 1 Target at the Manufacturing Cost for such Candidate Category 1 Compounds, Candidate Category 1 Products, and Companion Diagnostics. If Wave is the Manufacturing Lead with respect to a particular Collaboration Target, then Wave will supply to Takeda all Collaboration Compounds, Collaboration Products, and Companion Diagnostics directed to such Collaboration Target at [***]. All Manufacturing Costs incurred by the Parties related to the Manufacture of Licensed Category 1 Compounds, Licensed Category 1 Products, and Companion Diagnostics directed to a Licensed Category 1 Target under any Licensed Category 1 Development Plan or Licensed Category 1 Commercialization Plan will be Eligible Development Expenses or Eligible Commercialization Expenses (as applicable), and will be allocated between the Parties in the same manner as other expenses incurred under such Licensed Category 1 Development Plan or Licensed Category 1 Commercialization Plan as set forth in Section 5.1.3 (Licensed Category 1 Development Plan) or Section 8.1.2 (Licensed Category 1 Commercialization Plans), respectively. [***].

7.5. **Second Source.** For all Collaboration Compounds, Collaboration Products, and Companion Diagnostics directed to any Collaboration Target, the JSC will discuss in good faith engaging a Third Party contract manufacturer as a second source in order to ensure adequate supply of all such Collaboration Compounds, Collaboration Products, and Companion Diagnostics. If either Party wishes to engage a second source pursuant to this Section 7.5 (Second Source), then the Manufacturing Lead will engage a reputable Third Party second source in a timely manner. The Manufacturing Lead will be the Party to enter into a supply agreement with any second source supplier and such supply agreement will contain a provision permitting the free assignment to the other Party in the event that such other Party becomes the Manufacturing Lead with respect to Collaboration Compounds, Collaboration Products, or Companion Diagnostics being Manufactured under such agreement. Such agreement will provide that the other Party may be a third party to the applicable related Quality Agreement. [***]. Notwithstanding the foregoing, in no event will a Party be obligated to engage a second source with respect to any Licensed Category 1 Compounds, Licensed Category 1 Collaboration Products, or Companion Diagnostics directed to a Licensed Category 1 Target prior to the Completion of the POM Study for the applicable Licensed Category 1 Target.

7.6. **Shortages.** In the event of a shortage of Collaboration Compounds, Collaboration Products, or Companion Diagnostics directed to any Collaboration Target for Development or Commercialization purposes, the Parties will in good faith discuss and seek to agree upon a plan to increase supply volume as necessary, which plan may include utilization of a second source supplier to be engaged in accordance with Section 7.5 (Second Source).

7.7. **Manufacturing and Supply Agreements.** If Wave is the Manufacturing Lead for Licensed Compounds, Licensed Products, or Companion Diagnostics directed to a Licensed Target, then, within [***] pursuant to which (a) if Takeda is the Development Lead for the applicable Licensed Target, Wave would Manufacture and supply to Takeda the applicable Licensed Compounds, Licensed Products, and Companion Diagnostics directed to such Licensed Target for Development purposes (the "**Clinical Supply Agreement**") and (b) Wave would Manufacture and supply to Takeda the applicable Licensed Compounds, Licensed Products, and Companion Diagnostics directed to such Licensed Target for Commercialization purposes (the "**Commercial Supply Agreement**," and together with the Clinical Supply Agreement, the "**Supply Agreements**"). The Clinical Supply Agreement will contain all of the terms and conditions set forth on Schedule 7.7(a) (the "**Clinical Supply Term Sheet**"), and the Commercial Supply Agreement will contain all of the terms and conditions set forth on Schedule 7.7(b) (the "**Commercial Supply Term Sheet**," and together with the Clinical Supply Term Sheet, the "**Term Sheets**"), and in addition each Supply Agreement will (a) provide that Wave will supply all applicable Licensed Compounds, Licensed Products, and Companion Diagnostics to Takeda at the Supply Price, (b) contain customary terms and conditions, including quality, and (c) otherwise be consistent with this Agreement. In the event that the Parties [***].

7.8. **Supply Failure.** Notwithstanding anything to the contrary in this Article 7 (Manufacturing), if there is a Supply Failure under any Supply Agreement with respect to a particular Collaboration Target, then Wave will have an opportunity to propose a plan to Takeda for curing the Supply Failure, which plan may include Wave promptly building up a second source supplier in accordance with Section 7.5 (Second Source). In such instance of a Supply Failure, Wave will remain the Manufacturing Lead; except that Takeda will have the right to become the Manufacturing Lead following such Supply Failure, which right Takeda may exercise by providing written notice to Wave if [***]. If Takeda becomes the Manufacturing Lead pursuant to the previous sentence, then Takeda may require a manufacturing technology transfer pursuant

to Section 7.9 (Technology Transfer; Transition of Third Party Agreements to Takeda) from Wave to Takeda or to a Third Party contract manufacturer identified by Takeda, subject only to Wave's prior consent (not to be unreasonably withheld) to any such second source that is a Third Party. [***].

7.9. **Technology Transfer; Transition of Third Party Agreements to Takeda.** If Takeda becomes the Manufacturing Lead for a Collaboration Target and all Collaboration Compounds, Collaboration Products, and Companion Diagnostics directed thereto, then, with respect to such applicable Collaboration Compounds, Collaboration Products, and Companion Diagnostics directed to the applicable Collaboration Target:

7.9.1. **Manufacturing Technology and Analytical Method Transfer**. Wave will promptly conduct a transfer of Manufacturing technology and Analytical Methods to Takeda or one or more designees, such designees to be subject to Wave's prior consent (not to be unreasonably withheld), to enable Takeda or such designee, at one or more locations as determined by Takeda or such designees, such locations subject to Wave's prior consent (not to be unreasonably withheld), to Manufacture such Collaboration Compounds, Collaboration Products, or Companion Diagnostics directed to the applicable Collaboration Target. The Parties will work to complete the technology and Analytical Methods transfer as quickly as reasonably practicable.

7.9.2. **Third Party Agreements**. Upon Takeda's request, Wave will, at such time as determined by the JSC, assign to Takeda or its designee all then-existing Manufacturing contracts entered into between Wave (or any of its Affiliates or Sublicensees) with Third Party contract manufacturers that are related to the Manufacture of such Collaboration Compounds (including amidites and other precursors included in the Wave Technology), Collaboration Products, or Companion Diagnostics directed to the applicable Collaboration Target ("**Third Party Manufacturing Agreements**"), unless any such Third Party Manufacturing Agreement expressly prohibits such assignment, in which case Wave will cooperate with Takeda in all reasonable respects to secure the consent of the applicable Third Party to such assignment; *provided that* with respect to agreements that are not solely related to the Manufacture of such Collaboration Compounds, Collaboration Products, or Companion Diagnostics directed to the applicable Collaboration Target, Wave will have no obligation to assign such agreements to Takeda. If any such consent is not obtained with respect to a Third Party Manufacturing Agreement or if any Third Party Manufacturing Agreement is not assigned to Takeda because it is not solely related to the Manufacture of Collaboration Compounds, Collaboration Products, or such Companion Diagnostics, then Wave will, and cause its Affiliates and its Sublicensees to, obtain for Takeda all of the practical benefit and burden under such Third Party Manufacturing Agreement, including by (a) entering into appropriate and reasonable alternative arrangements on terms agreeable to Takeda, (b) subject to the consent and control of Takeda, enforcing for the account of Takeda, any and all rights of Wave (or such Affiliate or Sublicensee, as applicable) against the other party thereto arising out of the breach or cancellation thereof by such other party or otherwise, and (c) reasonably cooperating with Takeda with respect to the supply of such Collaboration Compounds, Collaboration Products, and Companion Diagnostics.

7.9.3. **During Pendency of Technology and Analytical Method Transfer**. During the pendency of any Manufacturing technology and Analytical Method transfer performed pursuant to Section 7.9.1 (Manufacturing Technology and Analytical Method Transfer) and through the completion of any related transfer activities, Wave will continue to provide Takeda with Manufacturing services in accordance with the most recently agreed-upon Supply Agreements.

8. COMMERCIALIZATION

8.1. Commercialization of Licensed Category 1 Products.

8.1.1. **Licensed Category 1 Target Global Commercialization Strategy.** The key Commercialization principles for each Licensed Category 1 Product and any Companion Diagnostic related to such Licensed Category 1 Product will be set forth in a written summary of the global Commercialization strategy for such Licensed Category 1 Product and Companion Diagnostics that the JSC will review and discuss (each, a "**Licensed Category 1 Global Commercialization Strategy**"). Takeda will prepare, with input from Wave, the initial draft of such Licensed Category 1 Global Commercialization Strategy for each Licensed Category 1 Product and any Companion Diagnostic related to such Licensed Category 1 Product no later than ninety (90) days after Initiation of the first Registrational Study and then will review and update such Licensed Category 1 Global Commercialization Strategy annually thereafter. Takeda will submit each Licensed Category 1 Global Commercialization Strategy, and each material update thereto, to the JSC for its review and discussion. The Licensed Category 1 Joint Team will coordinate the implementation of each Licensed Category 1 Commercialization Plan for each Licensed Category 1 Product and related Companion Diagnostics in accordance with the applicable Licensed Category 1 Global Commercialization Strategy for such Licensed Category 1 Product and related Companion Diagnostics.

8.1.2. **Licensed Category 1 Commercialization Plans.** On a Licensed Category 1 Target by Licensed Category 1 Target basis, at such times as the Licensed Category 1 Joint Team deems appropriate, but no less than [***], Takeda will prepare a reasonably detailed commercialization plan, with input from Wave, for such Licensed Category 1 Product and any Companion Diagnostic related to such Licensed Category 1 Product in the U.S., which will include (a) all Wave Commercialization Activities, (b) any Post-Marketing Commitments or other post-approval Clinical Studies to be conducted in the U.S. (for each Licensed Category 1 Target, a "**U.S. Licensed Category 1 Commercialization Plan**") and submit such plan to the JSC. Similarly, on a Licensed Category 1 Target-by-Licensed Category 1 Target basis, at such times as the Licensed Category 1 Joint Team deems appropriate, but no less than [***], Takeda will prepare a reasonably detailed commercialization plan for such Licensed Category 1 Product and any Companion Diagnostic related to such Licensed Category 1 Product in the Ex-U.S. Territory, which will include any Post-Marketing Commitments or other post-approval Clinical Studies to be conducted in the Ex-U.S. Territory (for each Licensed Category 1 Target, an "**Ex-U.S. Licensed Category 1 Commercialization Plan**" and together with the U.S. Licensed Category 1 Commercialization Plan, the "**Licensed Category 1 Commercialization Plans**") and submit such plan to the JSC. Each Licensed Category 1 Commercialization Plan will be consistent with the requirements of the most recent Licensed Category 1 Global Commercialization Strategy for the

applicable Licensed Category 1 Product. Each Licensed Category 1 Commercialization Plan will include a high level budget in the format set forth on Schedule 8.1.2 for the activities set forth therein, taking into account the expected costs of the activities contemplated by the applicable Licensed Category 1 Commercialization Plan and the FTE Rate for non-scientific and non-technical personnel who will perform activities under such Licensed Category 1 Commercialization Plan, and will include the cost categories that are included in the Licensed Category 1 Profit & Loss Share (each, a "**U.S. Licensed Category 1 Commercialization Budget**" and "**Ex-U.S. Licensed Category 1 Commercialization Budget**," respectively, and collectively the "**Licensed Category 1 Commercialization Budgets**"). [***], (i) Takeda, with input from Wave, will review and update each U.S. Licensed Category 1 Commercialization Plan (including the U.S. Licensed Category 1 Commercialization Budget set forth therein), and (ii) Takeda will update each Ex-U.S. Licensed Category 1 Commercialization Plan (including the Ex-U.S. Licensed Category 1 Commercialization Budget set forth therein). The JSC will review, discuss, and determine whether to approve each Licensed Category 1 Commercialization Budget and each material update thereto, and will review and discuss each Licensed Category 1 Commercialization Plan and each material update thereto. Neither of Takeda nor Wave US will be required to expend more than the amounts set forth in the applicable Licensed Category 1 Commercialization Budget then in effect for the applicable activities.

8.1.3. **Oversight and Performance of Commercialization Activities**. The Licensed Category 1 Joint Team and the JSC will oversee the Commercialization of all Licensed Category 1 Products and Companion Diagnostics directed to each Licensed Category 1 Target within the Field in the U.S. [***]. Each Party will conduct all Commercialization of Licensed Category 1 Products and Companion Diagnostics directed to the applicable Licensed Category 1 Target in accordance with the applicable Licensed Category 1 Commercialization Plan.

8.1.4. **Commercialization Activities in the U.S.** Except as set forth in Section 8.1.5 (Wave Commercialization Activities in the U.S.), Takeda will be solely responsible for all Commercialization and Medical Affairs activities in the U.S. for each Licensed Category 1 Product and Companion Diagnostics directed to each Licensed Category 1 Target, including handling all returns, recalls, order processing, invoicing and collection, booking of sales, inventory and receivables, and managed and government pricing programs, other than the Wave Commercialization Activities. Wave US will not accept orders for any Licensed Category 1 Product or Companion Diagnostic directed to a Licensed Category 1 Target or make sales for its own account or for Takeda's account, and if Wave US receives any order for a Licensed Category 1 Product or Companion Diagnostic directed to a Licensed Category 1 Target in the U.S., then it will refer such orders to Takeda for acceptance or rejection.

8.1.5. **Wave Commercialization Activities in the U.S.** For each Licensed Category 1 Product and Companion Diagnostics directed to each Licensed Category 1 Target, (a) Takeda and Wave US will collaborate in the planning of all Wave Commercialization Activities for each Licensed Category 1 Product and Companion Diagnostic directed to each Licensed Category 1 Target, and [***].

8.1.6. **U.S. Pricing Matters**. Subject to applicable Law, Takeda will have responsibility for determining all Pricing Matters for each Licensed Category 1 Product and Companion Diagnostics directed to a Licensed Category 1 Target in the U.S., subject to the JSC's right to review, discuss, and determine whether to approve any such Pricing Matter.

8.1.7. **Commercialization in the Ex-U.S. Territory**. Takeda will be solely responsible for all Commercialization activities for each Licensed Category 1 Product and Companion Diagnostic directed to each Licensed Category 1 Target in the Ex-U.S. Territory, in each case, including Pricing Matters, handling all returns, recalls, order processing, invoicing and collection, booking of sales, inventory and receivables, and managed and government pricing programs and Medical Affairs.

8.1.8. **Licensed Category 1 Product Commercialization Reporting**. Commencing upon the First Commercial Sale of the Lead Category 1 LP, each Party will keep the Licensed Category 1 Joint Team informed regarding the progress and results of the Commercialization activities for Licensed Category 1 Products and Companion Diagnostics related to any such Licensed Category 1 Products for which such Party is responsible, including by providing an annual written report to the Licensed Category 1 Joint Team reviewing results versus goals set forth in the Licensed Category 1 Commercialization Plan.

8.2. Commercialization of Licensed Category 2 Products

8.2.1. **Licensed Category 2 Commercialization Plans**. On a Licensed Category 2 Target-by-Licensed Category 2 Target basis, no less than [***], Takeda will prepare and deliver to the JSC a high level summary of the Commercialization activities to be undertaken with respect to such Licensed Category 2 Product and any Companion Diagnostic related to such Licensed Category 2 Product (each, a "**Licensed Category 2 Commercialization Plan**"). [***] Takeda will update each Licensed Category 2 Commercialization Plan for the upcoming Calendar Year based on the currently available information and data and provide such updates to the JSC, including anticipated launch dates in Major Market Countries. Further, on an annual basis, Takeda will provide to Wave revenue projections for the next [***] year period, on a Calendar Quarter basis; projections are not, and will not be construed to be, commitments to achieve any such revenue. Further, Takeda will provide notice to the JSC if Takeda elects to suspend or no longer proceed with Commercializing any Licensed Category 2 Products.

8.2.2. **Commercialization Activities for Licensed Category 2 Products**. Takeda will be solely responsible for all Commercialization activities for each Licensed Category 2 Product and any Companion Diagnostic directed to any Licensed Category 2 Target, including Distribution Matters, warehousing, Pricing Matters, order processing, invoicing and collection, booking of sales, inventory and receivables, and managed, government pricing programs and Medical Affairs.

8.3. **Commercialization Expenses.** The Parties will share the Eligible Commercialization Expenses incurred in connection with the performance of Commercialization activities related to each Licensed Category 1 Product and Companion Diagnostic directed to each Licensed Category 1 Target as set forth in Section 11.3.4 (Licensed Category 1 Profit & Loss Share for Commercialization Activities). Takeda will be responsible for all FTE Costs and Out-of-Pocket Costs incurred in the performance of Commercialization activities related to Licensed Category 2 Products and Companion Diagnostics directed to any Licensed Category 2 Target.

8.4. **Commercialization Diligence Obligations.** Takeda (itself or through one or more of its Affiliates or Sublicensees) will use Commercially Reasonable Efforts to Commercialize, as applicable, each Licensed Product and each Companion Diagnostic related to such Licensed Product, in each case, for which Regulatory Approval in the Territory has been obtained. In addition, each Party (itself or through one or more of its Affiliates or Sublicensees) will use Commercially Reasonable Efforts to perform the activities for which it is responsible under the applicable Commercialization Plan for such Licensed Product and Companion Diagnostic related to such Licensed Product.

8.5. **Advertising and Promotional Materials.**

8.5.1. **Branding**. Takeda, in its reasonable discretion, from time to time during the Term, will lead and develop (and thereafter modify and update) a branding strategy (including positioning, messages, logo, colors, and other visual branding elements) (a "**Branding Strategy**") for each Licensed Product and any Companion Diagnostic related to such Licensed Product for use in the Field in the Territory.

8.5.2. **Promotional Materials**. Takeda will be responsible for the creation, preparation, production, reproduction, review (medical, legal, and regulatory), and filing with the applicable Regulatory Authorities, of Promotional Materials relating to each Licensed Product and any Companion Diagnostic related to such Licensed Product. All such Promotional Materials will be compliant with applicable Law and consistent in all material respects with the Commercialization Plan for such Licensed Product and Companion Diagnostic. Unless prohibited under applicable Law, Takeda will include a reference in such Promotional Materials to such Licensed Product and Companion Diagnostics related to such Licensed Products as being sold under license from Wave. Takeda will own all rights, title, and interest, in and to any and all Promotional Materials for any Licensed Product.

8.5.3. **Licensed Product Packaging.** Takeda will develop and approve packaging and labeling for each Licensed Product, which in all cases will be consistent with the applicable Commercialization Plan and in accordance with applicable Law.

8.5.4. **Product Trademarks**. Takeda will have the sole right to determine and own the Trademarks used in connection with the Exploitation of the Licensed Products and Companion Diagnostics related to such Licensed Products on a worldwide basis. Subject to any pre-existing Trademarks a Party may have, neither Party will, directly or indirectly: (a) use in their respective businesses, any Trademark that is confusingly similar to, misleading, or deceptive with respect to or that dilutes any Trademark for a Licensed Product or Companion Diagnostic related to any Licensed Product; and (b) do any act which endangers, destroys, or similarly affects, in any material respect, the value of the goodwill pertaining to the Trademarks for any Licensed Product or Companion Diagnostic related to any Licensed Product. Each Party agrees to conform to the customary industry standards for the protection of Trademarks for Licensed Products and Companion Diagnostics related to any Licensed Products and such guidelines of Takeda with respect to manner of use (in the case of Wave, as provided in writing by Takeda) of the Trademarks for Licensed Products and Companion Diagnostics related to any Licensed Product. Without limiting any pre-existing Trademarks a Party may have, neither Party will, directly or indirectly, attack, dispute, or contest the validity of or ownership of such Trademark anywhere in the Territory or any registrations issued or issuing with respect thereto.

8.6. **Recalls, Market Withdrawals, or Corrective Actions.** The Regulatory Lead will have the sole right to decide whether to conduct any recall or other similar market withdrawal or other action for any Collaboration Product or any Companion Diagnostic related to any such Collaboration Product, and the manner in which any such recall will be conducted (including any such recall requested by a Regulatory Authority). The Regulatory Lead will bear the expenses of any such recall, unless any such recall is required as a result of Non-Conforming Product, in which case the Manufacturing Lead will bear such expenses, and the Regulatory Lead may invoice the Manufacturing Lead for all costs and expenses reasonably incurred in connection with such recall and the Manufacturing Lead will pay to the Regulatory Lead all undisputed amounts set forth in any such invoice no later than thirty (30) days after receipt thereof (so long as the Regulatory Lead and the Manufacturing Lead are not the same entity). For Licensed Category 1 Products, all such expenses will be treated as Eligible Development Expenses or Eligible Commercialization Expenses (as applicable).

9. GOVERNANCE

9.1. **Alliance Manager.** Promptly following the Effective Date, each Party will designate an individual to facilitate communication and coordination of the Parties' activities under this Agreement relating to Collaboration Compounds, Collaboration Products, and Companion Diagnostics directed to any Collaboration Target and to provide support and guidance to the JSC, including preparing agendas, meeting materials, and meeting minutes for JSC meetings (each, an "**Alliance Manager**"). Each Alliance Manager may also serve as a representative of its respective Party on the JSC and one or more Subcommittees.

9.2. **Joint Steering Committee.**

9.2.1. **Purpose; Formation; Dissolution**. Within [***], the Parties will establish a joint steering committee (the "**JSC**") that will monitor and provide strategic oversight of the activities under this Agreement and facilitate communication between the Parties with respect to the Exploitation of Collaboration Compounds, Collaboration Products, and Companion Diagnostics directed to any Collaboration Target, all in accordance with this Agreement.

9.2.2. **Composition**. [***], with each representative having knowledge and expertise in the Exploitation of compounds and products similar to the Collaboration Compounds, Collaboration Products, and Companion Diagnostics under this Agreement, and having sufficient seniority within the applicable Party to provide meaningful input and make decisions arising within the scope of the JSC's responsibilities. The JSC may change its size from time to time by consent of its members, *provided that* the JSC will consist at all times of an equal number of representatives of each Party, unless otherwise agreed by the Parties in writing. Each Party may replace its JSC representatives at any time upon written notice to the other Party. The JSC may invite non-members to participate in the discussions and meetings of the JSC, but such participants will have no voting authority at the JSC and must be bound under written obligations of confidentiality no less protective of the Parties' Confidential Information than those set forth in this Agreement. The JSC will be co-chaired, with one (1) chairperson designated by each Party, whose responsibilities will include conducting meetings, including, when feasible, ensuring that objectives for each meeting are set and achieved. Responsibility for running each meeting of the JSC will alternate between the chairpersons from meeting-to-meeting, with Wave's chairperson running the first

meeting. The Alliance Managers will work with the chairpersons to prepare and circulate agendas and to ensure the preparation and approval of minutes. The chairpersons have no additional powers or rights beyond those held by the other JSC representatives.

9.2.3. **Responsibilities with respect to Collaboration Targets**. In addition to its overall responsibility for monitoring and providing strategic oversight with respect to the Parties' activities under this Agreement, the JSC will have the following responsibilities:

9.2.3.1. review, discuss, and determine whether to approve any additional costs or expenses to be included as Eligible Commercialization Expenses, as described in Section 1.94 (Eligible Commercialization Expenses), Section 1.202 (Medical Affairs Costs), and Section 1.221 (Other Operating Income/Expense), respectively;

9.2.3.2. [***];

9.2.3.3. determine whether there has been a Technical Failure with respect to any Collaboration Target, as further described in Section 1.288 (Technical Failure) and Section 5.7 (Technical Failure);

9.2.3.4. provide each Party reasonably-detailed updates regarding any activities undertaken by Third Parties, as described in Section 5.6 (Third Parties);

9.2.3.5. review and discuss any Material Communication with Regulatory Authorities, as described in Section 6.4 (Communications with Regulatory Authorities).

9.2.3.6. review and discuss filings or applications for Regulatory Approvals (other than INDs) of Collaboration Compounds, Collaboration Products, or Companion Diagnostics, and receipt or denial of Regulatory Approval for any such filings or applications for Collaboration Products or Companion Diagnostics, as described in Section 6.6 (Submissions);

9.2.3.7. review, discuss, and determine whether to approve the engagement of any Third Party contract manufacturer as a second source in order to ensure adequate supply of all Collaboration Compounds, Collaboration Products, and Companion Diagnostics directed to any Collaboration Target, as described in Section 7.5 (Second Source);

9.2.3.8. determine a date by which Wave will, subject to Takeda's request, transfer all Third Party Manufacturing agreements, to the extent required by and as described in Section 7.9.2 (Third Party Agreements);

9.2.3.9. review, discuss, and determine whether to approve as a Collaboration In-License any Potential In-License, as described in Section 10.5.3 (Potential In-Licenses) and Section 10.5.4 (Collaboration In-Licenses);

9.2.3.10. review, discuss, and determine an equitable allocation of any non-product specific upfront payments, milestone payments or similar payments payable under any Potential In-License, as described in Section 10.5.3 (Potential In-Licenses);

9.2.3.11. discuss in good faith strategies for abating any Competitive Infringement of any Collaboration Product within each Party's respective Territory, as described in Section 15.5.1 (Notices);

9.2.3.12. in addition to any items set forth on the agenda for a meeting of the JSC, at each meeting of the JSC, provide an update on all activities performed by each Party since the last meeting of the JSC, and evaluate the activities performed against all relevant plans. If a Party fails to provide such report at a meeting of the JSC, the other Party may request, and the reporting Party will provide, a written progress report that includes information regarding accrual, site initiation, progress on protocol writing, meeting requests and briefing documents, in the case of clinical or regulatory activities, and in other cases such information as is reasonably necessary to convey a reasonably comprehensive understanding of the status of the applicable Development, Manufacturing, regulatory or Commercialization activity; and

9.2.3.13. establish, but not delegate decision making authority to, such additional Subcommittees as it deems necessary to achieve the objective and intent of this Agreement.

9.2.4. **Additional Responsibilities with Respect to Category 1 Targets**. In addition, the JSC will have the following responsibilities with respect to Category 1 Targets:

9.2.4.1. review and determine whether to approve any Candidate In-Licenses in accordance with Section 10.5.2 (Candidate Category 1 In-Licenses);

9.2.4.2. in good faith, equitably apportion Patent Costs between the Parties to reflect the fair value attributable to the Licensed Category 1 Compounds, Licensed Category 1 Product, or Companion Diagnostics directed to the applicable Licensed Category 1 Target, in each case, as compared to other products or applications, as described in Schedule 1.94;

9.2.4.3. review, discuss, and determine whether to approve any changes in the scope of the Wave Commercialization Activities, as described in Section 1.313 (Wave Commercialization Activities);

9.2.4.4. review, discuss, and determine whether to approve all updates to the Candidate Category 1 Development Plans that are material, as described in Section 5.1.2 (Candidate Category 1 Development Plan);

9.2.4.5. review, discuss and determine whether to approve any amendments to the POM Criteria;

9.2.4.6. oversee the Development for each Category 1 Target in accordance with Section 5.1.1 (Category 1 Development Overview);

9.2.4.7. review and discuss progress reports of Development activities for under each Licensed Category 1 Program, as described in Section 5.1.6 (Category 1 Development Reports);

9.2.4.8. review, discuss, and determine whether to approve all Licensed Category 1 Transition Plans, and any updates thereto that are material, as described in Section 5.1.7 (Licensed Category 1 Transition Plan);

9.2.4.9. review, discuss, and determine whether to approve all Licensed Category 1 Development Plans (including the Licensed Category 1 Development Budget set forth therein), and any updates thereto that are material, as described in Section 5.1.3 (Licensed Category 1 Development Plan);

9.2.4.10. agree upon an appropriate allocation of Manufacturing responsibilities between the Parties to ensure sufficient quantities of the Licensed Category 1 Compounds, Licensed Category 1 Products, and Companion Diagnostics directed to a Licensed Category 1 Target, in each case, in order to complete the activities contemplated under each then-current Licensed Category 1 Development Plan and Licensed Category 1 Commercialization Plan, as described in Section 10.2 (Licensed Category 1 Targets);

9.2.4.11. review, discuss, and determine whether to approve Pricing Matters for Licensed Category 1 Products and Companion Diagnostics directed to a Licensed Category 1 Product, as described in Section 8.1.6 (U.S. Pricing Matters);

9.2.4.12. review and discuss each Licensed Category 1 Global Commercialization Strategy, as described in Section 8.1.1 (Licensed Category 1 Target Global Commercialization Strategy);

9.2.4.13. review, discuss, and determine whether to approve each U.S. Licensed Category 1 Commercialization Budget, and otherwise review and discuss each Licensed Category 1 Commercialization Plan, and, in each case, any update thereto that is material, as described in Section 8.1.2 (Licensed Category 1 Commercialization Plans);

9.2.4.14. review, discuss, and determine whether to approve any Potential Candidate Category 1 In-License Term Sheet and any Potential Candidate Category 1 In-License, as described in Section 10.5.2 (Candidate Category 1 In-Licenses); and

9.2.4.15. review, discuss, and determine whether expenses incurred by a Party for Development activities related to a Licensed Category 1 Target that do not fall within the definition of Eligible Development Expenses should be shared, as described in Section 11.3.2.3 (Expense Allocation).

9.2.5. **Additional Responsibilities with Respect to Licensed Category 2 Targets**. In addition, the JSC will in particular have the following responsibilities with respect to Licensed Category 2 Targets:

9.2.5.1. review any Proposed Category 2 Target Nomination Notice and determine whether to approve such Proposed Category 2 Target as a Licensed Category 2 Target, as described in Section 4.1 (Proposed Category 2 Targets);

9.2.5.2. after determination by an Expert that a Proposed Category 2 Target is [***], review any Proposed Category 2 Target Nomination Notice and determine whether to approve such Proposed Category 2 Target as a Licensed Category 2 Target, as described in Section 4.2 (Dispute Process);

9.2.5.3. review and determine whether to approve the replacement of a previously-selected Licensed Category 2 Target with a new Proposed Category 2 Target, as described in Section 4.3 (Licensed Category 2 Target Replacement);

9.2.5.4. determine whether to approve any Licensed Category 2 Research Plans (including the Licensed Category 2 Research Budget) and any updates thereto that are material, as described in Section 5.2.3 (Licensed Category 2 Research Plans), and review progress reports of Development activities under each Licensed Category 2 Research Program, as described in Section 5.2.6 (Licensed Category 2 Research Reports);

9.2.5.5. review, discuss, and determine whether to approve each Licensed Category 2 Transition Plan and any updates thereto that are material, as described in Section 5.3.2 (Licensed Category 2 Transition Plan);

9.2.5.6. review and discuss each Licensed Category 2 Development Plan and any updates thereto that are material, as described in Section 5.3.3 (Licensed Category 2 Development Plan);

9.2.5.7. review and discuss progress reports of Development activities for any Licensed Category 2 Development Programs, as described in Section 5.3.6 (Licensed Category 2 Development Reports);

9.2.5.8. review, discuss, and determine whether any Licensed Category 2 Product is being Developed [***]; and

9.2.5.9. facilitate the exchange of Licensed Category 2 Commercialization Plans, as described in Section 8.2.1 (Licensed Category 2 Commercialization Plans).

9.2.6. **JSC Meetings**. The JSC will meet at least [***] unless the Parties mutually agree in writing to a different frequency. No later than [***] Business Days prior to any meeting of the JSC (or such shorter time period as the Parties may agree), the Alliance Managers will prepare and circulate an agenda for such meeting; *provided*, *however*, that either Party may propose additional topics to be included on such agenda, either prior to or in the course of such meeting. Either Party may also call a special meeting of the JSC (by videoconference, teleconference, or in person) by providing at least [***] Business Days prior written notice to the other Party if such Party reasonably believes that a significant matter must be addressed prior to the next scheduled meeting, in which event such Party will work with the chairperson of the JSC and the

Alliance Managers to provide the members of the JSC no later than [***] Business Day prior to the special meeting with an agenda for the meeting and materials reasonably adequate to enable an informed decision on the matters to be considered. The JSC may meet in person, by videoconference or by teleconference. Notwithstanding the foregoing, at least [***] will be in person unless the Parties agree in writing to waive such requirement. In-person JSC meetings will be held at locations alternately selected by each Party. Each Party will bear the expense of its respective JSC members' participation in JSC meetings. Meetings of the JSC will be effective only if at least [***] is present or participating in such meeting. The Alliance Managers will be responsible for preparing reasonably detailed written minutes of all JSC meetings that reflect material decisions made and action items identified at such meetings. The Alliance Managers will send draft meeting minutes to each member of the JSC for review and approval within [***] days after each JSC meeting. Such minutes will be deemed approved unless one or more members of the JSC objects to the accuracy of such minutes within [***] Business Days of receipt.

9.3. Licensed Category 1 Joint Team.

9.3.1. **Formation; Composition; Dissolution**. No later than [***], the Parties will establish a committee to oversee the performance of activities under this Agreement with respect to Licensed Category 1 Targets (the "**Licensed Category 1 Joint Team**"). [***], with each representative having knowledge and expertise in the Exploitation of compounds and products similar to the Licensed Category 1 Compounds, Licensed Category 1 Products, and Companion Diagnostics, and having sufficient seniority within the applicable Party to provide meaningful input and make decisions arising within the scope of the Licensed Category 1 Joint Team's responsibilities. The Licensed Category 1 Joint Team may change its size from time to time and it is specifically anticipated by the Parties that the total number of representatives on the Licensed Category 1 Joint Team and the total number of representatives from each Party on the Licensed Category 1 Joint Team will each vary over time based on the activities being conducted under this Agreement. Each Party may replace its Licensed Category 1 Joint Team representatives at any time upon written notice to the other Party. The Licensed Category 1 Joint Team may invite non-members to participate in the discussions and meetings of the Licensed Category 1 Joint Team, but such participants have no voting authority at the Licensed Category 1 Joint Team and must be bound under written obligations of confidentiality no less protective of the Parties' Confidential Information than those set forth in this Agreement. The Licensed Category 1 Joint Team will be co-chaired, with one (1) chairperson designated by each Party, whose responsibilities will include conducting meetings, including, when feasible, ensuring that objectives for each meeting are set and achieved and overseeing each meeting.

9.3.2. **Responsibilities**. In addition, the Licensed Category 1 Joint Team will have the following responsibilities with respect to Category 1 Targets:

9.3.2.1. on at least [***], review, discuss, and update each Candidate Category 1 Development Plan for each Category 1 Target as described in Section 5.1.2 (Candidate Category 1 Development Plan) and Section 5.1.3 (Licensed Category 1 Development Plan), and submit all such updates thereto that are material to the JSC for approvals described in Section 9.2.4 (Additional Responsibilities with Respect to Category 1 Targets);

9.3.2.2. review and discuss progress reports of Development activities for under each Licensed Category 1 Program, as described in Section 5.1.6 (Category 1 Development Reports);

9.3.2.3. if the Development Lead for a Licensed Category 1 Target transitions from one Party to the other Party as described in Section 5.1.7 (Licensed Category 1 Transition Plan), prepare a Licensed Category 1 Transition Plan, and update thereto, and submit such Licensed Category 1 Transition Plan and any updates thereto that are material to the JSC for approval as described in Section 9.2.4 (Additional Responsibilities with Respect to Category 1 Targets);

9.3.2.4. oversee the Commercialization of all Licensed Category 1 Products and Companion Diagnostics directed to each Category 1 Target within the Field in the U.S. as described in Section 8.1.3 (Oversight and Performance of Commercialization Activities); and

9.3.2.5. review, discuss, and finalize a U.S. Licensed Category 1 Commercialization Plan for the Lead Category 1 LP directed to a Licensed Category 1 Target, and prepare updates thereto on at least [***], as described in Section 8.1.2 (Licensed Category 1 Commercialization Plans).

9.4. Category 2 Research Committee.

9.4.1. **Purpose; Formation; Dissolution**. [***], the Parties will establish a committee to oversee the performance of pre-clinical or non-clinical Development activities for Licensed Category 2 Compounds, Licensed Category 2 Products, and Companion Diagnostics directed to Licensed Category 2 Targets under this Agreement during the Licensed Category 2 Research Term (the "**Category 2 Research Committee**"). [***], with each representative having knowledge and expertise in the research and Development of compounds and products similar to the Licensed Category 2 Compounds, Licensed Category 2 Products, and Companion Diagnostics, and having sufficient seniority within the applicable Party to provide meaningful input and make decisions arising within the scope of the Category 2 Research Committee's responsibilities. The Category 2 Research Committee may change its size from time to time and it is specifically anticipated by the Parties that the total number of representatives on the Category 2 Research Committee and the total number of representatives from each Party on the Category 2 Research Committee will each vary over time based on the activities being conducted under this Agreement. Each Party may replace its Category 2 Research Committee representatives at any time upon written notice to the other Party. The Category 2 Research Committee may invite non-members to participate in the discussions and meetings of the Category 2 Research Committee, but such participants will have no voting authority at the Category 2 Research Committee and must be bound under written obligations of confidentiality no less protective of the Parties' Confidential Information than those set forth in this Agreement. The Category 2 Research Committee will be co-chaired, with one (1) chairperson designated by each Party, whose responsibilities will include conducting meetings, including, when feasible, ensuring that objectives for each meeting are set and achieved and overseeing each meeting. The Category 2 Research Committee will have no further responsibilities, on a Licensed Category 2 Target-by-Licensed

Category 2 Target basis upon the Completion of the IND-Enabling Study for the Major Market Countries for the Licensed Category 2 Products directed at such Licensed Category 2 Target and will disband permanently upon final Completion of the IND-Enabling Studies for the Major Market Countries for Licensed Category 2 Products directed at a Licensed Category 2 Target.

9.4.2. **Responsibilities with respect to Licensed Category 2 Targets**. In addition, the Category 2 Research Committee will in particular have the following responsibilities with respect to Licensed Category 2 Targets:

9.4.2.1. review and discuss progress reports of Development activities under each Licensed Category 2 Research Program, as described in Section 5.2.6 (Licensed Category 2 Research Reports);

9.4.2.2. review, discuss, and update each Licensed Category 2 Research Plan for each Licensed Category 2 Target as described in Section 5.2.3 (Licensed Category 2 Research Plans), submit all such updates thereto that are material to the JSC for approval as described in Section 9.2.5 (Additional Responsibility with Respect to Licensed Category 2 Targets), and review progress reports of Development activities under each Licensed Category 2 Research Program, as described in Section 5.2.6 (Licensed Category 2 Research Reports); and

9.4.2.3. prepare a Licensed Category 2 Transition Plan, and any updates thereto, as described in Section 5.3.2 (Licensed Category 2 Transition Plan), and submit such Licensed Category 2 Transition Plan and any updates thereto that are material to the JSC for approval as described in Section 9.2.4 (Additional Responsibility with Respect to Category 1 Targets).

9.5. **Subcommittee Meetings.** Each Subcommittee will meet at least [***], unless the Parties mutually agree in writing to a different frequency. No later than [***] Business Days prior to any meeting of any Subcommittee (or such shorter time period as the Parties may agree), the meeting managers will prepare and circulate an agenda for such meeting; *provided*, *however*, that either Party may propose additional topics to be included on such agenda, either prior to or in the course of such meeting. Either Party may also call a special meeting of any Subcommittee (by videoconference, teleconference, or in person) by providing at least [***] Business Days prior written notice to the other Party if such Party reasonably believes that a significant matter must be addressed prior to the next scheduled meeting, in which event such Party will work with the Alliance Managers to provide the members of the applicable Subcommittee, no later than [***] Business Day prior to the special meeting with an agenda for the meeting and materials reasonably adequate to enable an informed decision on the matters to be considered. Each Subcommittee may meet in person, by videoconference, or by teleconference. In-person Subcommittee meetings will be held at locations alternately selected by each Party. Each Party will bear the expense of its respective Subcommittee members' participation in the applicable Subcommittee meetings. Meetings of each Subcommittee will be effective only if at least [***] is present or participating in such meeting. Each Subcommittee's chairperson will be responsible for preparing reasonably detailed written minutes of the applicable Subcommittee meetings, as applicable, that reflect material decisions made and action items identified at such meetings. The applicable Subcommittee chairperson will send draft meeting minutes to each member of the applicable Subcommittee for review and approval within [***] days after each Subcommittee

meeting. Such minutes will be deemed approved unless one or more members of the Subcommittee objects to the accuracy of such minutes within [***] Business Days of receipt. Minutes will be officially endorsed by the Subcommittee at the next Subcommittee meeting, and will be signed by the Alliance Managers.

9.6. Decision-Making. Subject to the remainder of this Section 9.6 (Decision-Making) and Section 9.7 (Resolution of Committee Disputes), [***]. The representatives from each Party on any Subcommittee will have, collectively, [***] on behalf of that Party. Except as otherwise expressly set forth in this Agreement, the phrase "determine," "designate," "approve" or "determine whether to approve" by the JSC or any Subcommittee and similar phrases used in this Agreement will mean approval in accordance with this Section 9.6 (Decision-Making), including the escalation and tie-breaking provisions herein.

9.6.1. Decisions of the Subcommittees. If a Subcommittee cannot reach [***] on an issue that comes before the Subcommittee within [***] days of the meeting where such issue was raised and over which the applicable Subcommittee has oversight, then the Parties will refer such matter to the JSC for resolution in accordance with 9.6.2 (Decisions of the JSC).

9.6.2. Decisions of the JSC. The JSC has the authority (a) for matters specifically delegated to it or expressly specified in this Agreement, (b) to resolve disputes within the jurisdiction of any Subcommittees that the Parties may subsequently create to assist in governance of this Agreement, (c) to determine the number of representatives from each Party on the Licensed Category 1 Joint Team and Category 2 Research Committee, which will be an equal number for each Party (unless otherwise agreed by the JSC), (d) to establish, but not delegate decision making authority to, such Subcommittees as it deems necessary to achieve the objective and intent of this Agreement, and (e) with respect to any other matter agreed to by the Parties in writing. For clarity, neither the JSC nor any Subcommittee will have any power to amend, modify, or waive compliance with this Agreement. The JSC has no other authority under this Agreement. The JSC will use good faith efforts, in compliance with this Section 9.6.2 (Decisions of the JSC), to promptly resolve any such matter for which it has authority. If the JSC is unable to reach consensus with respect to any such matter for which it is responsible within [***].

9.7. Resolution of Committee Disputes**.**

9.7.1. Referral to Executive Officers. If a Party makes an election under Section 9.6.2 (Decisions of the JSC) to refer a matter as to which the JSC cannot reach a consensus decision to the Executive Officers, then the JSC will submit in writing the respective positions of the Parties to their respective Executive Officers. Such Executive Officers will use good faith efforts, in compliance with this Section 9.7.1 (Referral to Executive Officers), to resolve promptly such matter within [***] after the JSC's submission of such matter to such Executive Officers, which good faith efforts will include at least [***].

9.7.2. Final Decision Making Authority; Non-Critical Matters. If the Executive Officers are unable to reach agreement on any such matter referred to such Executive Officers under Section 9.7.1 (Referral to Executive Officers) within such [***], then, if such matter is not a Critical Matter:

9.7.2.1. **Wave Decisions**. Notwithstanding Section 9.7.2.3 (Development Lead Decisions) or Section 9.7.2.4 (Manufacturing Lead Decisions), Wave will have final decision making authority over:

(a) matters relating to the [***]

(b) matters relating to activities related [***].

9.7.2.2. **Takeda Decisions**. Notwithstanding Section 9.7.2.3 (Development Lead Decisions) or Section 9.7.2.4 (Manufacturing Lead Decisions), Takeda will have final decision making authority over: [***].

9.7.2.3. **Development Lead Decisions**. The applicable Development Lead will have final decision making authority over matters related to the conduct of [***].

9.7.2.4. **Manufacturing Lead Decisions**. The applicable Manufacturing Lead will not have final decision making authority over [***].

9.7.2.5. **Expedited Arbitration**. Notwithstanding Section 9.7.2.3 (Development Lead Decisions) or Section 9.7.2.4 (Manufacturing Lead Decisions), [***] will be referred to Expedited Arbitration in accordance with Section 17.3.8 (Expedited Arbitration) if the Executive Officers are unable to reach unanimous agreement on any such matter.

9.7.2.6. **No Change**. Notwithstanding Section 9.7.2.3 (Development Lead Decisions) or Section 9.7.2.4 (Manufacturing Lead Decisions), no changes will be adopted with respect to the following matters if the Executive Officers are unable to reach unanimous agreement on any such matter: [***].

9.7.3. **Final Decision-Making Authority; Critical Matters**. If the Executive Officers are unable to reach unanimous agreement on any such matter that is a Critical Matter referred to such Executive Officers under Section 9.7.1 (Referral to Executive Officers) within [***], then:

9.7.3.1. **Referral to Expedited Arbitration**. The following Critical Matters will be referred to Expedited Arbitration in accordance with Section 17.3.8 (Expedited Arbitration): [***].

9.7.3.2. **No Change for Other Critical Matters**. With respect to any Critical Matters not referred to Expedited Arbitration in accordance with Section 9.7.3.1 (Referral to Expedited Arbitration), including all Candidate Category 1 Target Development Critical Matters, no changes will be adopted.

9.7.4. **Limitations on Decisions**. Notwithstanding anything to the contrary set forth in this Agreement, without the other Party's prior written consent, no exercise of a Party's decision-making authority on any such matters may, without the other Party's prior written consent, (a) result in a material increase in the other Party's or its Related

Parties' obligations, costs, or expenses under this Agreement or any Development Plan, Transition Plan, or Commercialization Plan, (b) impose any requirements that the other Party take or decline to take any action that would result in a violation of any Law or any agreement with any Third Party (including any In-License) or the infringement of intellectual property rights of any Third Party, or (c) otherwise conflict with this Agreement.

9.7.5. **Information**. Each Party will provide regular and fulsome updates to the other Party, through the Licensed Category 1 Joint Team, with respect to all activities undertaken by or on behalf of such Party under this Agreement. Without limiting the foregoing, during the Term, each Party will promptly notify the other Party of any material information regarding the Exploitation of any Collaboration Compound, Collaboration Product, or Companion Diagnostics, including any material correspondence with a Regulatory Authority, and each Party will provide the other Party with such information regarding this Agreement that the other Party may reasonably request.

9.7.6. **Good Faith**. In conducting themselves on committees, and in exercising their rights under this Section 9.7 (Resolution of Committee Disputes), all representatives of both Parties will consider diligently, reasonably, and in good faith all input received from the other Party, and will use reasonable efforts to reach consensus on all matters before them. In exercising any decision-making authority granted to it under this Section 9.7 (Resolution of Committee Disputes), each Party will act based on its good faith judgment taking into consideration such Party's obligations to use Commercially Reasonable Efforts with respect to Exploitation of Candidate Category 1 Compounds, Candidate Category 1 Products, Collaboration Compounds, and Collaboration Products as provided in this Agreement.

9.8. **Discontinuation of Participation on the JSC or any Subcommittee.** The activities to be performed by the JSC and each Subcommittee will solely relate to governance under this Agreement, and are not intended to be or involve the delivery of services. Except as set forth in this Section 9 (Governance), the JSC and each Subcommittee will continue to exist until the **Parties** agree to disband the JSC or any Subcommittee. Wave will have the right, but not the obligation, on a Licensed Category 2 Target-by-Licensed Category 2 Target basis to discontinue Wave's participation on the JSC and each Subcommittee with respect to a Licensed Category 2 Target no earlier than completion of the Licensed Category 2 Research Plan for such Licensed Category 2 Target. If Wave exercises such right to discontinue its participation, then Wave will provide prompt written notice to Takeda of such election including the applicable Licensed Category 2 Target, and thereafter Takeda will have the sole right and authority to take any action that had been within the JSC and each Subcommittee's purview previously with respect to the applicable Licensed Category 2 Compounds, Licensed Category 2 Products, and Companion Diagnostics directed to such Licensed Category 2 Target identified in Wave's written notice.

10. LICENSES

10.1. Category 1 Development Program.

10.1.1. **License Grant to Takeda**. Subject to the terms and conditions of this Agreement, on a Candidate Category 1 Target-by-Candidate Category 1 Target basis, during the Candidate Category 1 Development Term for a Candidate Category 1 Target, Wave hereby grants Takeda a non-transferable (except as provided in Section 17.1

(Assignment)), co-exclusive (with Wave), non-sublicensable (except to contractors performing activities for Takeda under the applicable Candidate Category 1 Development Plan) license in the Field and in the Territory under the Wave Technology solely to the extent necessary for Takeda to perform its obligations under the Candidate Category 1 Development Plan for such Candidate Category 1 Target. This license with respect to each Candidate Category 1 Target (including the Candidate Category 1 Compounds, Candidate Category 1 Products, and Companion Diagnostics directed thereto) will terminate with respect to such Candidate Category 1 Target upon the (a) expiration or termination of the Category 1 Development Program with respect to such Candidate Category 1 Target, if Takeda does not exercise an Option with respect to such Candidate Category 1 Target in accordance with this Agreement, or (b) the Licensed Target Date for such Candidate Category 1 Target, if Takeda exercises an Option with respect to such Candidate Category 1 Target.

10.1.2. **License Grant to Wave**. Subject to the terms and conditions of this Agreement, on a Candidate Category 1 Target-by-Candidate Category 1 Target basis, during the Candidate Category 1 Development Term for a Candidate Category 1 Target, Takeda hereby grants Wave a non-transferable (except as provided in Section 17.1 (Assignment)), co-exclusive (with Takeda), non-sublicensable (except to contractors performing activities for Wave under the applicable Candidate Category 1 Development Plan) license in the Field and in the Territory under the Takeda Technology solely to the extent necessary for Wave to perform its obligations under the Candidate Category 1 Development Plan for such Candidate Category 1 Target. This license with respect to each Candidate Category 1 Target (including the Candidate Category 1 Compounds, Candidate Category 1 Products, and Companion Diagnostics directed thereto) will terminate with respect to such Candidate Category 1 Target upon the (a) expiration or termination of the Category 1 Development Program with respect to such Candidate Category 1 Target, if Takeda does not exercise an Option with respect to such Candidate Category 1 Target in accordance with this Agreement, or (b) the Licensed Target Date for such Candidate Category 1 Target, if Takeda exercises an Option with respect to such Candidate Category 1 Target. Notwithstanding the co-exclusive nature of the license grant to Wave, Takeda may grant licenses to its Related Parties under the Takeda Technology with respect to Licensed Category 1 Products, Licensed Category 1 Compound, and Companion Diagnostics directed to Category 1 Targets.

10.2. Licensed Category 1 Targets.

10.2.1. **License Grant to Takeda**. Subject to the terms and conditions of this Agreement, on an Licensed Category 1 Target-by-Licensed Category 1 Target basis, effective on the Licensed Target Date for the applicable Licensed Category 1 Target, Wave hereby grants Takeda a non-transferable (except as provided in Section 17.1 (Assignment)) license, with the right to grant sublicenses in accordance with Section 10.4 (Sublicensing Terms), under the Wave Technology to Exploit all Licensed Compounds, Licensed Products, and Companion Diagnostics directed to the applicable Licensed Category 1 Target in the Field in the Territory. Such license will be (a) co-exclusive with Wave under the Wave Technology with respect to Development and Manufacturing of Licensed Compounds, Licensed Products, and Companion Diagnostics directed to the applicable Licensed Category 1 Target, and (b) exclusive (even as to Wave, subject to the retained rights set forth in this Section 10.2.1 (License

Grant to Takeda)) with respect to all other Exploitation of the Licensed Compounds, Licensed Products, and Companion Diagnostics directed to the applicable Licensed Category 1 Target, including Commercialization of such Licensed Category 1 Products and Companion Diagnostics related thereto outside the U.S.; *provided, however,* that Wave retains the exclusive right under the Wave Technology, with the right to grant licenses in accordance with Section 10.4 (Sublicensing Terms), solely to the extent necessary for Wave to perform the Wave Commercialization Activities in accordance with the applicable U.S. Licensed Category 1 Commercialization Plan.

10.2.2. **License Grant to Wave**. Subject to the terms and conditions of this Agreement, on an Licensed Category 1 Target-by-Licensed Category 1 Target basis, effective on the Licensed Target Date for the applicable Licensed Category 1 Target, Takeda hereby grants Wave a non-transferable (except as provided in Section 17.1 (Assignment)) license, with the right to grant sublicenses in accordance with Section 10.4 (Sublicensing Terms), under the Takeda Technology solely to the extent necessary for Wave to perform (a) its obligations under the applicable Licensed Category 1 Development Plan and the Supply Agreements, and (b) the Wave Commercialization Activities as set forth under the applicable U.S. Licensed Category 1 Commercialization Plan. Such license will be co-exclusive with Takeda under the Takeda Technology with respect to (i) Development and Manufacturing of Licensed Compounds, Licensed Products, and Companion Diagnostics directed to the applicable Licensed Category 1 Target in accordance with the applicable Licensed Category 1 Development Plan and Supply Agreements, and (ii) performance of the Wave Commercialization Activities in accordance with the applicable U.S. Licensed Category 1 Commercialization Plan. Notwithstanding the co-exclusive nature of the license grant to Wave, Takeda may grant licenses to its Related Parties under the Takeda Technology with respect to Licensed Category 1 Products, Licensed Category 1 Compound, and Companion Diagnostics directed to Category 1 Targets.

10.3. Licensed Category 2 Targets.

10.3.1. **License Grant to Takeda**. Subject to the terms and conditions of this Agreement, on a Licensed Category 2 Target-by-Licensed Category 2 Target basis, Wave hereby grants Takeda a non-transferable (except as provided in Section 17.1 (Assignment)), exclusive (even as to Wave), subject to the retained rights set forth in this Section 10.3.1 (License Grant to Takeda) license, with the right to grant sublicenses in accordance with Section 10.4 (Sublicensing Terms), under the Wave Technology to Exploit all Licensed Category 2 Compounds, Licensed Category 2 Products, and Companion Diagnostics directed to such Licensed Category 2 Target in the Field in the Territory. Notwithstanding the foregoing, Wave retains the right under the Wave Technology, with the right to grant licenses in accordance with Section 10.4 (Sublicensing Terms), solely to the extent necessary for Wave to (a) perform its obligations under the Licensed Category 2 Research Plan or the Licensed Category 2 Development Plan for such Licensed Category 2 Target, and (b) Manufacture (or have Manufactured) any Licensed Category 2 Compounds, Licensed Category 2 Products, or Companion Diagnostics directed to such Licensed Category 2 Target.

10.3.2. **License Grant to Wave**. Subject to the terms and conditions of this Agreement, on a Licensed Category 2 Target-by-Licensed Category 2 Target basis, Takeda hereby grants Wave a non-transferable (except as provided in Section 17.1 (Assignment)), non-exclusive, royalty-free license, with the right to grant sublicenses in accordance with Section 10.4 (Sublicensing Terms), under the Takeda Technology solely to the extent necessary for Wave to perform its obligations under the Licensed Category 2 Research Plan or the Licensed Category 2 Development Plan for such Licensed Category 2 Target and the Supply Agreements.

10.4. Sublicensing Terms.

10.4.1. **Takeda Sublicensing Rights**. Subject to the requirements of this Section 10.4 (Sublicensing Terms), Takeda will have the right to sublicense any of its rights under Section 10.1.1 (License Grant to Takeda) and its rights under 10.2.1 (License Grant to Takeda) to Develop any Licensed Category 1 Compound, Licensed Category 1 Product, or Companion Diagnostic directed to any Licensed Category 1 Compound, in each case, to any of its Affiliates or any contractors performing activities for Takeda under the applicable Candidate Category 1 Development Plan or Licensed Category 1 Development Plan without Wave's prior consent, or, with Wave's prior consent to any Third Party for (a) Development of Category 1 Compounds, Category 1 Products, and Companion Diagnostics directed to the applicable Candidate Category 1 Target or Licensed Category 1 Target under the applicable Candidate Category 1 Development Plan or Licensed Category 1 Development Plan, or (b) to Commercialize Licensed Category 1 Compounds, Licensed Category 1 Products, and Companion Diagnostics directed to any Licensed Category 1 Target in the United States. In addition, without the prior consent of Wave, but subject to the requirements of this Section 10.4 (Sublicensing Terms), Takeda will have the right to sublicense (A) effective on the Licensed Target Date for the applicable Licensed Category 1 Target, its rights under Section 10.2.1 (License Grant to Takeda) to Commercialize Licensed Category 1 Compounds, Licensed Category 1 Products, and Companion Diagnostics directed to any Licensed Category 1 Target outside of the United States, and (B) its rights under Section 10.3.1 (License Grant to Takeda) to Develop or Commercialize Licensed Category 2 Compounds, Licensed Category 2 Products, and Companion Diagnostics directed to any Licensed Category 2 Target, in each case ((A) and (B)) to any of its Affiliates and [***] (which sublicensed rights may be further sublicensable through multiple tiers to any of Takeda's Affiliates or [***]) in the Territory. In addition, subject to the requirements of this Section 10.4 (Sublicensing Terms), on a Licensed Target-by-Licensed Target basis, with respect to any Licensed Target for which Takeda is the Manufacturing Lead, Takeda will have the right to sublicense any of its rights under Section 10.2.1 (License Grant to Takeda) or Section 10.3.1 (License Grant to Takeda) to any Third Party (which sublicensed rights may be further sublicensable through multiple tiers) for the Manufacture of Licensed Compounds, Licensed Products, or Companion Diagnostics directed to such Licensed Target, without Wave's consent. Notwithstanding anything herein to the contrary, in no event shall Takeda or any of its Related Parties sublicense any of the rights granted under Section 10.1.1 (License Grant to Takeda), Section 10.2.1 (License Grant to Takeda) or Section 10.3.1 (License Grant to Takeda) to any of the Third Parties set forth on Schedule 10.4.1 or their respective affiliates, successors, or assigns, except as otherwise provided on such schedule.

10.4.2. **Wave Sublicensing Rights**. Without the prior consent of Takeda, but subject to the requirements of this Section 10.4 (Sublicensing Terms), Wave will have the right to sublicense any of its rights under Section 10.1.2 (License Grant to Wave) and its rights under Section 10.2.2 (License Grant to Wave) to Develop any Category 1 Compound, Category 1 Product, or Companion Diagnostic directed to any Category 1 Target, in each case, to any of its Affiliates or any Third Party. In addition, subject to the requirements of this Section 10.4 (Sublicensing Terms), Wave will have the right to sublicense its rights under Section 10.3.2 (License Grant to Wave) to (a) any of its Affiliates or any contractors performing activities for Wave under the applicable Licensed Category 2 Research Plan or Licensed Category 2 Development Plan, in each case, without Takeda's prior consent, or, (b) to any or Third Party for Development of Licensed Category 2 Compounds, Licensed Category 2 Products, and Companion Diagnostics directed to the applicable Licensed Category 2 Target under the applicable Licensed Category 2 Research Plan or Licensed Category 2 Development Plan, with Takeda's prior written consent. In addition, subject to the requirements of this Section 10.4 (Sublicensing Terms), on a Licensed Target-by-Licensed Target basis, with respect to any Licensed Target for which Wave is the Manufacturing Lead, Wave will have the right to sublicense any of its rights under Section 10.2.2 (License Grant to Wave) or Section 10.3.2 (License Grant to Wave) to any Third Party (which sublicensed rights may be further sublicensable through multiple tiers) for the Manufacture of Licensed Compounds, Licensed Products, or Companion Diagnostics directed to such Licensed Target, without Takeda's prior consent.

10.4.3. **Sublicensing Agreements**. Each sublicense granted by a Party pursuant to this Section 10.4 (Sublicensing Terms) will be subject and subordinate to this Agreement and will contain provisions consistent with the terms and conditions of this Agreement. Each Party will as soon as reasonably practicable thereafter, provide the other Party with a copy of any executed sublicense agreement covering a material sublicense granted hereunder (which copy may be redacted to remove provisions that are not necessary to monitor compliance with this Section 10.4 (Sublicensing Terms)), and each such sublicense agreement will contain the following provisions: a requirement that the Sublicensee comply with the confidentiality and non-use provisions of Section 12 (Confidentiality and Publication) with respect to the other Party's Confidential Information.

10.4.4. **Liability of the Sublicensing Party**. Notwithstanding any sublicense, the sublicensing Party will remain primarily liable to the other Party for the performance of all of its obligations under, and such Party's compliance with all provisions of, this Agreement.

10.5. **In-Licenses.** The Parties agree that all upfront, milestone, royalty, and other payments to any Third Party in respect of any Collaboration In-License, Candidate In-License, Existing Wave In-Licenses, or Existing Takeda In-License will be deemed a "**Third Party Payment**" and subject to this Section 10.5 (In-Licenses).

10.5.1. **Existing In-Licenses**. Responsibility for Collaboration In-Licenses, Existing Wave In-Licenses, and Existing Takeda In-License (and Third Party Payments thereunder) will be as follows:

10.5.1.1. **Existing Wave In-Licenses**. [***].

10.5.1.2. Existing Takeda In-Licenses. [***].

10.5.2. **Candidate Category 1 In-Licenses**. On a Candidate Category 1 Target-by-Candidate Category 1 Target basis, during the Candidate Category 1 Development Term for a Candidate Category 1 Target, if Wave desires to enter into any agreement for the right to use any Patents or Know-How of a Third Party to Exploit any Candidate Category 1 Compound, Candidate Category 1 Product, or Companion Diagnostics directed to such Candidate Category 1 Target (a "**Potential Candidate Category 1 In-License**"), then Wave will (a) present the proposed material terms of such Potential Candidate Category 1 In-License (the "**Potential Candidate Category 1 In-License Term Sheet**") to the JSC for approval, and (b) prior to execution of such Potential Candidate Category 1 In-License, present the proposed execution version thereof to the JSC for approval. In each case of (a) and (b) in the foregoing sentence, the JSC will have ten (10) Business Days to determine whether to approve the Potential Candidate Category 1 In-License Term Sheet or Potential Candidate Category 1 In-License, as applicable (such approval not to be unreasonably withheld). If the JSC (i) so approves the proposed execution version of a Potential Candidate Category 1 In-License, or (ii) within the applicable ten (10) Business Day period does not expressly approve or withhold approval of a Potential Candidate Category 1 In-License Term Sheet or the proposed execution version of a Potential Candidate Category 1 In-License, then, in each case ((i) or (ii)), such Potential Candidate Category 1 In-License will be a Candidate In-License for purposes of this Agreement. If, within the applicable ten (10) Business Day period, the JSC responds to Wave indicating that the JSC does not approve a Potential Candidate Category 1 In-License Term Sheet or the proposed execution version of a Potential Candidate Category 1 In-License, then such Potential Candidate Category 1 In-License will not be a Candidate In-License for purposes of this Agreement unless and until the JSC approves a revised version of such Potential Candidate Category 1 In-License Term Sheet or proposed execution version of such Potential Candidate Category 1 In-License in accordance with this Section 10.5.2 (Candidate Category 1 In-Licenses). [***].

10.5.3. **Potential In-Licenses**. On a Licensed Target-by-Licensed Target basis, the JSC may determine that Exploitation of Licensed Compounds, Licensed Products, or Companion Diagnostics directed to a Licensed Target may require or benefit from a grant of rights under additional Patents or Know-How of Third Parties, whether by license or acquisition (each, a "**Potential In-License**"). If a Party desires to acquire or otherwise enter into any Potential In-License with respect to a Licensed Category 1 Target after the Licensed Target Date for such Licensed Category 1 Target or after the Effective Date with respect to a Licensed Category 2 Target (or has entered into such a Potential In-License that it desires for the JSC to approve as a Collaboration In-License), then in each case such Party will bring such Potential In-License to the attention of the JSC. If a Potential In-License is brought to the attention of the JSC pursuant to this Section 10.5.3 (Potential In-Licenses), then the Parties will, through the JSC, review, discuss, and determine whether to approve making the rights to be granted under such Potential In-License available for use by the Parties pursuant to this Agreement with respect to such Party's rights under this Agreement to Exploit Licensed Compounds, Licensed Products, and Companion Diagnostics directed to the Licensed Target to which such Potential In-License relates. The JSC will review and discuss the rationale of including such Potential In-License for use by the Parties with respect to the applicable Licensed Target pursuant to this Agreement [***], and determine whether to approve such Potential In-License as a Collaboration In-License for the applicable Licensed Target

10.5.4. **Collaboration In-Licenses**. For any Potential Candidate Category 1 In-License or Potential In-License that the JSC approves for use by the Parties pursuant to this Agreement, (a) such Potential Candidate Category 1 In-License or Potential In-License will be deemed to be a "**Collaboration In-License**" hereunder, (b) if it has not already done so, the Party proposing to enter into a Collaboration In-License may enter into such Collaboration In-License on the terms approved by the JSC (including the scope of the grant of rights under such In-License and the proposed economics thereunder), (c) solely following approval by the JSC (and execution of such Collaboration In-License if it had not yet been entered into), the Patents and Know-How in-licensed under such Collaboration In-License will be deemed "Controlled" under this Agreement as Wave Technology or Takeda Technology for purposes of the Exploitation of Licensed Compounds, Licensed Products, and Companion Diagnostics directed to the applicable Licensed Target, and (d) [***].

10.5.5. **Non-Approved Potential In-Licenses**. If the JSC does not approve a Potential In-License as a Collaboration In-License, then (a) such Potential Category 1 In-License or Potential In-License will not be a Collaboration In-License hereunder, and (b) the Patents and Know-How in-licensed under such Potential Category 1 In-License or Potential In-License will not be included as Wave Technology or Takeda Technology and will not be "Controlled" by the party to the Potential Category 1 In-License or Potential In-License for purposes of this Agreement. Notwithstanding anything to the contrary set forth in this Agreement, neither Party will negotiate for or agree to economic terms in any such Potential Category 1 In-License or Potential In-License in a manner that (i) results in the fees, royalties, milestones or other remuneration payable thereunder with respect to the other Party being disproportionately higher than the amounts payable with respect to other (sub)licensees, or (ii) discriminates against the other Party versus Third Parties in connection with such Potential Category 1 In-License or Potential In-License, including by way of identity of the (sub)licensee or the field or territory available for (sub)license.

10.5.6. **Compliance with In-Licenses**. All licenses and other rights granted to Takeda under this Section 10 (Licenses) are subject to the rights and obligations of Wave under the Wave In-Licenses. All licenses and other rights granted to Wave under this Section 10 (Licenses) are subject to the rights and obligations of Takeda under the Takeda In-Licenses. Each Party will comply with all applicable provisions of the In-Licenses, and will perform and take such actions as may be required to allow the Party that is party to such In-License to comply with its obligations thereunder, including obligations relating to sublicensing, patent matters, confidentiality, reporting, audit rights, indemnification and diligence, in each case, to the extent that such Party is provided a copy of such In-License by the Party that is the party thereto. Without limiting the foregoing, each Party will prepare and deliver to the other Party any additional reports required under the applicable In-Licenses and reasonably requested by such other Party, in each case sufficiently in advance to enable the Party that is party to such In-License to comply with its obligations under the applicable In-Licenses. In addition, each Party agrees, upon the other Party's reasonable request, to provide the other Party with copies of any other In-Licenses to which it is a party. Confidential Information of the providing Party or its counterparty may be redacted from such copies, except to the extent that such information is required in order to enable the other Party to comply with its obligations to the providing Party under this Agreement with respect to such In-License or in order to enable the providing Party to ascertain compliance with the terms and conditions of this Agreement.

10.5.7. [***].

10.6. **Bankruptcy.** All rights and licenses granted under or pursuant to this Agreement by a Party to the other are and will otherwise be deemed to be, for purposes of Section 365(n) of the Bankruptcy Code, licenses of right to "intellectual property" as defined under Section 101 of the Bankruptcy Code. The Parties agree that the Parties and their respective Sublicensees, as Sublicensees of such rights under this Agreement, will retain and may fully exercise all of their rights and elections under the Bankruptcy Code and any foreign counterpart thereto. The Parties further agree that upon commencement of a bankruptcy proceeding by or against a Party (the "**Bankrupt Party**") under the Bankruptcy Code, the other Party (the "**Non-Bankrupt Party**") will be entitled to a complete duplicate of, or complete access to (as the Non-Bankrupt Party deems appropriate), all such intellectual property and all embodiments of such intellectual property. Such intellectual property and all embodiments of such intellectual property will be promptly delivered to the Non-Bankrupt Party (a) upon any such commencement of a bankruptcy proceeding and upon written request by the Non-Bankrupt Party, unless the Bankrupt Party elects to continue to perform all of its obligations under this Agreement, or (b) if not delivered under clause (a) above, upon the rejection of this Agreement by or on behalf of the Bankrupt Party and upon written request by the Non-Bankrupt Party. The Bankrupt Party (in any capacity, including debtor-in-possession) and its successors and assigns (including any trustee) agree not to interfere with the exercise by the Non-Bankrupt Party or its Related Parties of its rights and licenses to such intellectual property and such embodiments of intellectual property in accordance with this Agreement, and agrees to assist the Non-Bankrupt Party and its Related Parties in obtaining such intellectual property and such embodiments of intellectual property in the possession or Control of Third Parties as are reasonably necessary or desirable for the Non-Bankrupt Party to exercise such rights and licenses in accordance with this Agreement. The foregoing provisions are without prejudice to any rights the Non-Bankrupt Party may have arising under the Bankruptcy Code or other Laws.

10.7. **No Other Rights.** Except as otherwise expressly provided in this Agreement, under no circumstances will a Party or any of its Affiliates, as a result of this Agreement, obtain any ownership interest, license or other right in or to any Know-How, Patents or other intellectual property of the other Party, including tangible or intangible items owned, controlled or developed by the other Party, or provided by the other Party to the receiving Party at any time, pursuant to this Agreement. Neither Party nor any of its Affiliates will use or practice any Know-How licensed or provided to such Party or any of its Affiliates outside the scope of or otherwise not in compliance with the rights and licenses granted to such Party and its Affiliates under this Agreement.

11. PAYMENTS

11.1. **Upfront Payment.** Takeda will pay a one-time payment of [***] to Wave UK and [***] to Wave US (the proportionate allocation of this payment between Wave UK and Wave US, the "**Wave Ratio**"), such payment to be made on the later of (i) the fifteenth (15th) Business Day following the Effective Date or (ii) the fifth (5th) Business Day following Takeda's receipt of an invoice from Wave US (which invoice may be delivered on or after the Effective Date). Each such payment will be non-refundable, non-creditable, and not subject to set-off. By March 31, 2018, the Parties will agree on a draft allocation of value of the rights granted to Takeda under this Agreement with respect to Candidate Category 1 Programs and the rights granted to Takeda under this Agreement with respect to the Licensed Category 2 Programs and such draft allocation will be subject to review and adjustment by the independent auditor of each Party.

11.2. Equity Investment. Takeda and Wave Singapore will enter into the Share Purchase Agreement as of the Execution Date.

11.3. Category 1 Targets.

11.3.1. **Option Exercise Fee**. On a Candidate Category 1 Target-by-Candidate Category 1 Target basis, Takeda will pay an exercise fee of [***] to exercise the Option for such Candidate Category 1 Target ("**Option Exercise Fee**"). Takeda will pay the Option Exercise Fee with respect to the exercise of the Option for a Candidate Category 1 Target no later than thirty (30) days after receipt of an invoice from Wave for such Option Exercise Fee (which invoice Wave may not deliver until the occurrence of the HSR Conditions with respect to any HSR Filing made in connection with the exercise of such Option, but which invoice Wave may otherwise deliver promptly following the receipt by Wave of an Option Exercise Notice with respect to the Option for such Candidate Category 1 Target). Each Option Exercise Fee payment will be allocated between Wave US and Wave UK in accordance with the Wave Ratio. Such payments will be non-refundable, non-creditable, and not subject to set-off.

11.3.2. **Eligible Development Expenses for Licensed Category 1 Targets**.

11.3.2.1. **Expense Sharing**. On a Licensed Category 1 Target-by-Licensed Category 1 Target basis, Takeda and Wave US will share equally (50%/50%) in the total Eligible Development Expenses incurred by the Parties and their Affiliates with respect to such Licensed Category 1 Target in accordance with the procedures set forth in this Section 11.3.2 (Eligible Development Expenses for Licensed Category 1 Targets). The Parties will use Commercially Reasonable Efforts, as appropriate, to mitigate any cost overrun beyond the applicable amounts set forth in the Licensed Category 1 Development Budgets.

11.3.2.2. **Eligible Development Expenses Report**. For each Licensed Category 1 Target, commencing upon the first Calendar Quarter immediately following Takeda's exercise of an Option for such Licensed Category 1 Target and continuing on a Calendar Quarterly basis thereafter so long as a Party incurs Eligible Development Expenses, each of Wave US and Takeda will submit to a finance officer designated by Wave and a finance officer designated by Takeda (the "**Finance Officers**") a report setting forth, with respect to Licensed Category 1 Targets, the Eligible Development Expenses actually incurred by such Party in such just-completed Calendar Quarter. Where this Agreement requires a calculation involving Eligible Development Expenses, the Eligible Development Expenses that are to be used in such calculations are the net Eligible Development Expenses after any recovery of related VAT. Where VAT is paid by a Party with respect to any transactions under this Agreement, such Party will use reasonable efforts to recover such VAT. Each such report will specify in reasonable detail all such costs, and, if reasonably requested by Wave or Takeda, the applicable Party will provide any invoices or other supporting documentation for any payments to a Third Party or with respect to which documentation is otherwise reasonably requested within fifteen (15) days after the last day of each Calendar Quarter. Within twenty (20) days after the last day of each Calendar

Quarter, Takeda will prepare a reconciliation and send such report to the Finance Officers. Within twenty five (25) days after the last day of each Calendar Quarter, the Finance Officers will confer and agree in writing on whether a reconciliation payment is due either from Wave US to Takeda or from Takeda to Wave US to effect the sharing of expenses set forth in Section 11.3.2.1 (Expense Sharing), and if so, the amount of such reconciliation payment. Wave US or Takeda, as applicable, if required to pay such reconciliation payment, will submit the undisputed portion of any such payment to Takeda or Wave US, respectively, as applicable, within forty-five (45) days after receipt of the other Party's invoice for such amount. In the event of any disagreement with respect to the calculation of such reconciliation payment, the Party owing payment will pay any undisputed portion of such reconciliation payment in accordance with the foregoing timetable and will pay the remaining, disputed portion within fifteen (15) days after the date on which Wave and Takeda, using good faith efforts, resolve the Dispute, which Dispute, at the request of either Party, will be resolved in accordance with Section 17.3.8 (Expedited Arbitration). In addition, each Party will consider in good faith other reasonable procedures proposed by the other Party for sharing financial information in order to permit each Party to close its books periodically in a timely manner. **In addition to the above, within fifteen (15) days after the last day of the second month of every Calendar Quarter, so long as a Party incurs Eligible Development Expenses, each of Wave US and Takeda will submit to the Finance Officers a report setting forth, with respect to Licensed Category 1 Targets, the Eligible Development Expenses actually incurred by such Party in such just-completed two month period as well as an estimate of expected expenses to be incurred in the third month of the current Calendar Quarter.**

11.3.2.3. **Expense Allocation**. Any expenses incurred by a Party for Development activities related to a Licensed Category 1 Target that do not fall within the definition of Eligible Development Expenses will be borne solely by such Party, unless the JSC determines otherwise.

11.3.3. **Category 1 Targets Development Milestone Payments**. Subject to this Section 11.3.3 (Category 1 Targets Development Milestone Payments), on a Licensed Category 1 Target-by-Licensed Category 1 Target basis, Takeda will make the [***] milestone payments set forth in Table 11.3.3 below (each, a "**Category 1 Development Milestone Payment**") to Wave in accordance with Section 11.3.3.4 (Payment Terms for Category 1 Development Milestone Payments) upon the first achievement of each development or regulatory milestone event set forth in Table 11.3.3 (each, a "**Category 1 Development Milestone Event**") by the first Licensed Category 1 Product directed to each Licensed Category 1 Target. For clarity, references to any Licensed Category 1 Product include Combination Products.

Table 11.3.3 – Category 1 Development Milestones	
Category 1 Development Milestone Event	***Category 1 Development Milestone Payment***
(1) [***]	[***]
(2) [***]	[***]
(3) [***]	[***]
(4) [***]	[***]
(5) [***]	[***]

11.3.3.1. **C9orf72**. Notwithstanding anything to the contrary set forth in this Agreement, solely with respect to the Category 1 Target [***] applicable Category 1 Development Milestone Payment set forth in Table 11.3.3 above.

11.3.3.2. **HTT**. For the avoidance of doubt, the Category 1 Development Milestone Payment corresponding to Category 1 Development Milestone [***].

11.3.3.3. **Additional Category 1 Development Milestone Terms**. Notwithstanding the foregoing, for the purpose of construing the Category 1 Development Milestone Payments specified in the Table 11.3.3 above:

(a) Subject to Section 11.3.3.1 (C9orf72) and Section 11.3.3.2 (HTT), but notwithstanding any other provision of this Agreement, [***].

(b) If, for a Licensed Category 1 Target, any given Category 1 Development Milestone Payment is due with respect to such Licensed Category 1 Target and one or more previous Category 1 Development Milestone Payments with respect to such Licensed Category 1 Target that would reasonably have been anticipated to precede such Category 1 Development Milestone Payment for the achievement of Category 1 Development Milestone Events have not been paid for any reason, then payment of all such preceding unpaid Category 1 Development Milestone Payments with respect to such Licensed Category 1 Target will be due at such time as well. For example, if Category 1 Development Milestone Payment #3 were to become due with respect to a Licensed Category 1 Target, and Category 1 Development Milestone Event #2 has not yet been achieved with respect to such Licensed Category 1 Target and accordingly Category 1 Development Milestone Payment #2 had not been paid with respect to such Licensed Category 1 Target, then Category 1 Development Milestone Payment #2 will become due with respect to such Licensed Category 1 Target at the time Category 1 Development Milestone Payment #3 becomes due with respect to such Licensed Category 1 Target.

11.3.3.4. **Payment Terms for Category 1 Development Milestone Payments**. Takeda will provide Wave with written notice of its achievement of each Category 1 Development Milestone Event within thirty (30) days after such achievement. After receipt of such notice, Wave will submit an invoice to Takeda for the corresponding Category 1 Development Milestone Payment, [***]. Takeda will make the corresponding Category 1 Development Milestone Payment to the applicable Wave Party or Parties within forty-five (45) days after receipt of such invoice.

11.3.4. **Licensed Category 1 Profit & Loss Share for Commercialization Activities**. On a Licensed Category 1 Target-by-Licensed Category 1 Target basis, as of each Licensed Target Date, **Takeda and Wave US** will share in Operating Profits or Losses with respect to Commercialization activities for each Licensed Category 1 Product **in the U.S.** as follows: Wave US will bear (and be entitled to) [***] and Takeda will bear (and be entitled to) [***] of such Operating Profits or Losses (the "**U.S. Licensed Category 1 Profit & Loss Share**"). **Takeda and Wave UK will share in Operating Profits or Losses with respect to Commercialization activities for each Licensed Category 1 Product in the Ex-U.S. Territory as follows:** [***] **(the "Ex-U.S. Territory Licensed Category 1 Profit & Loss Share", and, together with the U.S. Licensed Category 1 Profit & Loss Share, the "Licensed Category 1 Profit & Loss Share").** Schedule 11.3.4 sets forth the procedures for quarterly reporting of actual results and review and discussion of potential discrepancies, quarterly reconciliation, reasonable forecasting, and other finance and accounting matters, and to the extent such matters are not set forth in Schedule 11.3.4, the Licensed Category 1 Joint Team will establish such matters.

11.3.5. **Allocation of Costs to a Licensed Category 1 Target**. Notwithstanding anything to the contrary set forth in this Agreement, including in Schedule 11.3.4, to the extent any cost or expense that may be included in Eligible Development Expense or Eligible Commercialization Expense is incurred for an activity that is directed to both (i) a Licensed Category 1 Compound, Licensed Category 1 Product, or Companion Diagnostic directed to the applicable Licensed Category 1 Target, on the one hand, and (ii) other products of a Party, on the other hand, then such costs and expenses of such activity will be reasonably allocated between the portion of the activity attributable to each respective product under (i) and (ii) above and will only be included in Eligible Development Expenses or Eligible Commercialization Expenses to the extent of such agreed allocation.

11.4. Licensed Category 2 Targets.

11.4.1. **Licensed Category 2 Research Expense Payments**.

11.4.1.1. **Initial Licensed Category 2 Research Term**. During the Initial Licensed Category 2 Research Term, Takeda will pay to Wave US the greater of (x) the following payments in Table 11.4.1.1 in accordance with this Section 11.4.1 (Licensed Category 2 Research Expense Payments) or (y) the amount set forth in the Licensed Category 2 Research Budget for the preceding twelve (12) month period during the Initial Licensed Category 2 Research Term *plus* Allowable Overruns actually incurred during such twelve (12) month period (each, an "**Annual Research Fee**"). Each such

Annual Research Fee will be due and payable on each of the "Dates" set forth in Table 11.4.1.1 and will be non-refundable, non-creditable, and not subject to set-off, but must be carried forward in accordance with Section 11.4.1.2 (Excess Licensed Category 2 Research Expenses).

Table 11.4.1.1 – Annual Research Fee

Date	Annual Research Fee
[***]	[***]
[***]	[***]
[***]	[***]

11.4.1.2. **Excess Licensed Category 2 Research Expenses**. Subject to Section 5.2.5 (Licensed Category 2 Research Expenses), to the extent (a) during any twelve (12) month period during the Initial Licensed Category 2 Research Term Wave or its Affiliates incur Licensed Category 2 Research Expenses in excess of the Annual Research Fee for such twelve (12) month period, or (b) during any Category 2 Target Specific Extension, Wave or its Affiliates continue to accrue Licensed Category 2 Research Expenses, in each case ((a) and (b)), [***], Wave US may send a reasonably detailed invoice to Takeda for each applicable twelve (12) month period of the Licensed Category 2 Research Term. In each such invoice, Wave US will include an itemized list of all Licensed Category 2 Research Expenses incurred by Wave and its Affiliates in such twelve (12) month period. Takeda will pay the undisputed amounts set forth in each such invoice to Wave US within forty-five (45) days after Takeda's receipt thereof. For the avoidance of doubt, total Annual Research Fees paid by Takeda will not be less than $60,000,000 (Sixty Million Dollars).

11.4.2. **Licensed Category 2 Products Development Milestone Payments**. Subject to this Section 11.4.2 (Licensed Category 2 Products Development Milestone Payments), on a Licensed Category 2 Target-by-Licensed Category 2 Target basis, Takeda will make the one-time (except as provided below) milestone payments in Table 11.4.2 below (each, a "**Category 2 Development Milestone Payment**," and together with Category 1 Development Milestone Payments, a "**Development Milestone Payment**") to Wave in accordance with Section 11.4.2.2 (Payment Terms for Category 2 Development Milestone Payments) upon the first achievement of each development and regulatory milestone event (each, a "**Category 2 Development Milestone Event**" and together with the Category 1 Development Milestone Event, a "**Development Milestone Event**") by the first Licensed Category 2 Product directed to each Licensed Category 2 Target. For clarity references to any Collaboration Product include a Combination Product.

Table 11.4.2 – Category 2 Development Milestones		
	Category 2 Development Milestone Event	***Category 2 Development Milestone Payment***
(1)	[***]	[***]
(2)	[***]	[***]
(3)	[***]	[***]
(4)	[***]	[***]
(5)	[***]	[***]

11.4.2.1. **Additional Category 2 Development Milestone Terms**. Notwithstanding the foregoing, for the purpose of construing the Category 2 Development Milestone Payments specified in Table 11.4.2 above:

(a) Each Category 2 Development Milestone Payment will be payable only once with respect to a specified Licensed Category 2 Target, on the first achievement of the applicable Category 2 Development Milestone Event by a Licensed Category 2 Product directed to such Licensed Category 2 Target, notwithstanding the number of times one or more Licensed Category 2 Products directed to the same such Licensed Category 2 Target may achieve any such Category 2 Development Milestone Event.

(b) If, for a Licensed Category 2 Target, any given Category 2 Development Milestone Payment is due with respect to such Licensed Category 2 Target and one or more previous Category 2 Development Milestone Payments with respect to such Licensed Category 2 Target that would reasonably have been anticipated to precede such Category 2 Development Milestone Payment for the achievement of Category 2 Development Milestone Events have not been paid for any reason, then payment of all such preceding unpaid Category 2 Development Milestone Payments with respect to such Licensed Category 2 Target will be due at such time as well. For example, if Category 2 Development Milestone Payment #3 were to become due with respect to a Licensed Category 2 Target, and Category 2 Development Milestone Event #2 has not yet been achieved with respect to such Licensed Category 2 Target and accordingly Category 2 Development Milestone Payment #2 had not been paid with respect to such Licensed Category 2 Target, then Category 2 Development Milestone Payment #2 will become due with respect to such Licensed Category 2 Target at the time Category 2 Development Milestone Payment #3 becomes due with respect to such Licensed Category 2 Target.

(c) Notwithstanding anything to the contrary set forth in this Agreement, if any of Category 2 Development Milestone Event [***].

11.4.2.2. **Payment Terms for Category 2 Development Milestone Payments**. Takeda will provide Wave with written notice of its achievement of each Category 2 Development Milestone Event within thirty (30) days after such achievement. After receipt of such notice, Wave will submit an invoice to Takeda for the corresponding Category 2 Development Milestone Payment, which invoice will specify the amount of such payment [***]. Takeda will make the corresponding Category 2 Development Milestone Payment to the applicable Wave Party or Parties within forty-five (45) days after receipt of such invoice.

11.4.3. **Licensed Category 2 Targets Category 2 Sales Milestone Payments**. Subject to Section 11.6.1 (Manner of Payment), on a Licensed Category 2 Target-by-Licensed Category 2 Target basis, Takeda will make the following one-time payments set forth in Table 11.4.3 below (each, a "**Category 2 Sales Milestone Payment**" and together with the Development Milestone Payments, the "**Milestone Payments**") to Wave in accordance with Section 11.4.3.1(c) (Additional Category 2 Sales Milestone Payment Terms) when aggregate annual Net Sales in the Territory in a given Calendar Year of all Licensed Category 2 Products directed to a Licensed Category 2 Target first reach the dollar thresholds indicated in Table 11.4.3 (each, a "**Category 2 Sales Milestone Event**"):

Table 11.4.3 – Category 2 Sales Milestones

Annual Net Sales in a Given Calendar Year for all Licensed Category 2 Products directed to a Particular Licensed Category 2 Target	***Category 2 Sales Milestone Payment***
[***]	[***]
[***]	[***]

11.4.3.1. Additional Category 2 Sales Milestone Payment Terms.

(a) Each Category 2 Sales Milestone Payment will be payable only once per Licensed Category 2 Target, the first time worldwide annual Net Sales in a given Calendar Year for all Licensed Category 2 Products directed to such Licensed Category 2 Target achieve the Category 2 Sales Milestone Event set forth in Table 11.4.3 above, notwithstanding the number of times one or more Licensed Category 2 Products directed to such same Licensed Category 2 Target may achieve any such Category 2 Sales Milestone Event.

(b) The Category 2 Sales Milestone Payments in this Section 11.4.3.1 (Additional Category 2 Sales Milestone Payment Terms) are additive, such that if more than one Category 2 Sales Milestone Event specified above is achieved in the same Calendar Year, then each corresponding Category 2 Sales Milestone Payment for such Category 2 Sales Milestone Event will be payable in the same Calendar Year.

(c) Each Category 2 Sales Milestone Payment will be deemed earned upon achievement of the corresponding Category 2 Sales Milestone Event, taking into account total sales of all Licensed Category 2 Products directed to a particular Licensed Category 2 Target and Takeda will notify Wave within thirty (30) days after achievement of such Category 2 Sales Milestone Event. After receipt of such notice, Wave will submit an invoice to Takeda for the corresponding Category 2 Sales Milestone Payment. Takeda will make the corresponding Category 2 Sales Milestone Payment within forty-five (45) days after receipt of such invoice and will allocate each Category 2 Sales Milestone Payment [***] based on the following:

(i) in the case of the first Category 2 Sales Milestone Payment, Wave US will be entitled to the portion of the Category 2 Sales Milestone Payment corresponding to the percentage of the initial [***] of annual Net Sales that is attributable to Net Sales of such Licensed Category 2 Products in the [***]will be entitled to the remaining portion of the Category 2 Sales Milestone Payment; and

(ii) in the case of the second Category 2 Sales Milestone Payment, [***] will be entitled to the portion of the Category 2 Sales Milestone Payment corresponding to the percentage of annual Net Sales [***] that is attributable to Net Sales of such Licensed Category 2 Products [***] will be entitled to the remaining portion of the Category 2 Sales Milestone Payment.

11.4.4. **Category 2 Royalties**. On a Licensed Category 2 Product-by-Licensed Category 2 Product basis, during the applicable Royalty Term for a Licensed Category 2 Product, Takeda will make royalty payments to Wave based on worldwide aggregate annual Net Sales made for each Licensed Category 2 Product in the Field in the Territory by Takeda and its Related Parties in a given Calendar Year at the royalty rates ("**Royalty Rates**") set forth in Table 11.4.4 below (the "**Category 2 Royalty**").

Table 11.4.4 – Royalty Rates

Annual Net Sales in a Given Calendar Year of a Licensed Category 2 Product	***Royalty Rate Paid on the Portion of Annual Net Sales in the Territory***
Portion up to and including [***]	[***]
Portion greater than [***] up to and including [***]	[***]
Portion greater than [***] up to and including [***]	[***]
Portion greater than [***]	[***]

By way of example for the Category 2 Royalty, in the first Calendar Quarter of the Calendar Year, if the worldwide aggregate annual Net Sales of a Licensed Category 2 Product for which Category 2 Royalties are due under this Section 11.4.4 (Category 2 Royalties) were [***], then the following Category 2 Royalty payment for the Calendar Quarter would be payable under this Section 11.4.4 (Category 2 Royalties): [***].

11.4.4.1. **Royalty Term**. Subject to this Section 11.4.4 (Category 2 Royalties), on a Licensed Category 2 Product-by-Licensed Category 2 Product and country-by-country basis, the Category 2 Royalties due under this Section 11.4.4 (Category 2 Royalties) will be payable on aggregate annual Net Sales of a Licensed Category 2 Product in a country during the period commencing on the First Commercial Sale of such Licensed Category 2 Product in a country until the latest of (a) expiration of the last Valid Claim of any Royalty Patent Covering such Licensed Category 2 Product in such country, (b) twelve (12) years after First Commercial Sale of such Licensed Category 2 Product in such country, or (c) expiration of all Regulatory Exclusivities for such Licensed Category 2 Product in such country (the "**Royalty Term**").

11.4.4.2. **Only One Royalty**. Only one royalty will be due with respect to the sale of the same unit of Licensed Category 2 Product. Only one royalty will be due hereunder on the sale of a Licensed Category 2 Product [***].

11.4.4.3. ***[***].***

11.5. **Other Amounts Payable.** With respect to any amounts owed under this Agreement by one Party to the other for which no other invoicing and payment procedure is specified in this Agreement (which amounts may include, for example, Third Party Payments that are the responsibility of one

Party or the other pursuant to Section 10.5 (In-Licenses)), within thirty (30) days after the end of each Calendar Quarter each Party will provide an invoice, together with reasonable supporting documentation, to the other Party for such amounts owed in respect of such Calendar Quarter. The owing Party will pay any undisputed amounts within forty-five (45) days after receipt of the invoice, and will pay any disputed amounts owed by such Party within forty-five (45) days of resolution of the Dispute.

11.6. Payment Terms.

11.6.1. **Manner of Payment**. All payments to be made by a Party hereunder will be made in Dollars by wire transfer to such bank account as the other Party may designate. At any time at [***].

11.6.2. **Reports and Royalty Payments**. Commencing upon the First Commercial Sale of a Licensed Category 2 Product and continuing for as long as Category 2 Royalties are due under Section 11.4.4 (Category 2 Royalties), within fifteen (15) days after each Calendar Quarter ending on March 30, June 30 or September 30 and within fifteen (15) Business Days after each Calendar Quarter ending on December 31, Takeda will furnish to Wave a written report that includes the following information for such Calendar Quarter: (a) [***] (each, a "**Royalty Report**"). All such reports will be treated as Confidential Information of Takeda. Upon receipt of such Royalty Report, Wave will issue an invoice to Takeda for the amount of Category 2 Royalties set forth in such Royalty Report, which invoice will specify the amount of the applicable Category 2 Royalties that should be made to [***]. Takeda will pay all Category 2 Royalties for a Calendar Quarter set forth in any such invoice within forty-five (45) days after receipt of such invoice. Notwithstanding the foregoing, unless otherwise determined [***].

11.6.3. **Records and Audits**. Each Party will keep complete, true, and accurate books and records in accordance with its Accounting Standards in relation to this Agreement, including in relation to Development Expenses, Eligible Commercialization Expenses, Gross Profit, Net Sales, Sublicense Revenue, and Category 2 Royalties. Each Party will keep such books and records for at least three (3) years following the Calendar Year to which they pertain. Each Party (the "**Auditing Party**") may, upon written request, cause an internationally-recognized independent accounting firm (the "**Auditor**") that is reasonably acceptable to the other Party (the "**Audited Party**") to inspect the relevant records of such Audited Party and its Affiliates to verify the payments made by the Audited Party and the related reports, statements and books of accounts, as applicable. Before beginning its audit, the Auditor will execute an undertaking acceptable to the Audited Party by which the Auditor agrees to keep confidential all information reviewed during the audit. Each Party and its Affiliates will make their records available for inspection by the Auditor during regular business hours at such place or places where such records are customarily kept, upon receipt of reasonable advance notice from the Auditing Party. The Auditor will review the records solely to verify the accuracy of the Audited Party's Development Expenses and royalties and compliance with the financial terms of this Agreement. Such inspection right will not be exercised more than once in any Calendar Year and not more frequently than once with respect to records covering any specific period of time. In addition, the Auditing Party will only be entitled to audit the books and records of the Audited Party from the three (3) Calendar Years prior to the Calendar Year in which

the audit request is made. The Auditing Party agrees to hold in strict confidence all information received and all information learned in the course of any audit or inspection, except to the extent necessary to enforce its rights under this Agreement or to the extent required to comply with any law, regulation or judicial order. The Auditor will provide its audit report and basis for any determination to the Audited Party at the time such report is provided to the Auditing Party before it is considered final. In the event that the final result of the inspection reveals an undisputed underpayment or overpayment by either Party, the underpaid or overpaid amount will be settled promptly. The Auditing Party will pay for such inspections, as well as its expenses associated with enforcing its rights with respect to any payments hereunder. In addition, if an underpayment of more than [***] of the total payments due hereunder for the applicable year is discovered, then the fees and expenses charged by the Auditor will be paid by Audited Party.

11.6.4. **Currency Exchange**. With respect to Net Sales of Licensed Products invoiced in Dollars, the Net Sales, Category 2 Royalties of Licensed Products, and other amounts due to Wave hereunder will be expressed in Dollars. When conversion of payments from any foreign currency is required to be undertaken by Takeda, the Dollar equivalent will be calculated using Takeda's then-current standard exchange rate methodology as applied in its external reporting for the conversion of foreign currency sales into Dollars.

11.6.5. **Taxes**.

11.6.5.1. **VAT**. It is understood and agreed between the Parties that any payments made under this Agreement are exclusive of VAT. Where VAT is properly added to a payment made under this Agreement, the Party making the payment will pay the amount of such VAT only on receipt of a valid Tax invoice (or, where there is no provision in the legislation for the jurisdiction concerned that a VAT invoice is required to be issued, a written demand containing such information as is customary in that jurisdiction) issued in accordance with the Laws and regulations of the country in which the VAT is chargeable.

11.6.5.2. **Withholding Taxes**. In the event any payments made pursuant to this Agreement become subject to withholding Taxes under the Law or regulations of any jurisdiction, the Party making such payment will deduct and withhold the amount of such Taxes for the account of the payee to the extent required by applicable Law or regulations and such amounts payable to the payee will be reduced by the amount of Taxes deducted and withheld. Any such withholding Taxes required under applicable Law or regulations to be paid or withheld will be an expense of, and borne solely by, the payee, and the payee will indemnify and hold harmless the Party making any payment pursuant to this Agreement for any such withholding Taxes (including, for the avoidance of doubt, any additional amounts of Taxes later determined by a Tax authority to have been required to be withheld); *provided, however,* that the Party making such payment will not be entitled to indemnification for any penalties or other additions to Tax arising solely as a result of such Party's failure to timely remit the applicable Taxes in accordance with the Tax forms provided by the payee pursuant to Section 11.6.5.5 (Tax Cooperation).

11.6.5.3. **No Other Reductions**. Apart from any such permitted withholding and those deductions expressly included in the definition of Net Sales, the amounts payable hereunder will not be reduced on account of any Taxes, unless required by applicable Law.

11.6.5.4. **Tax Exemptions and Credits**. The Parties will cooperate with each other in seeking any tax exemption or credits that may be available with respect to any Collaboration Product, including the tax credit available under Section 45C of the Internal Revenue Code by reason of a Party's research and Development expenditures contributing to the Collaboration Product being granted orphan drug status by the FDA, or equivalent foreign Law.

11.6.5.5. **Tax Cooperation**. To the extent that the Party making a payment is required to deduct and withhold Taxes on any payments under this Agreement, the Party making such payment will pay the amounts of such Taxes to the proper Tax authority in a timely manner and promptly transmit to the payee an official Tax certificate or other evidence of such withholding sufficient to enable the payee to claim such payments of Taxes. To the extent that the Party making a payment under this Agreement is required to deduct and withhold Taxes on any such payment, such Party will provide the payee with written notice of the required withholding as promptly as reasonably practical (and in any event, no later than fifteen (15) Business Days) prior to making such payment and will cooperate with the payee as provided in this Section 11.6.5.5 (Tax Cooperation) in order to mitigate the imposition of such withholding Taxes, and the payee will provide any Tax forms to the Party making such payment that may be reasonably necessary in order for such Party not to withhold Tax or to withhold Tax at a reduced rate under an applicable bilateral income Tax treaty. The payee will use reasonable efforts to provide any such Tax forms to the Party making the payment at least ten (10) Business Days prior to the due date for any payments for which the payee desires that the Party making the payment apply a reduced withholding rate. Each Party will provide the other with reasonable assistance to enable the recovery, as permitted by Law, of withholding Taxes, VAT, or similar obligations resulting from payments made under this Agreement, such recovery to be for the benefit of the Party bearing such withholding Tax or VAT.

11.6.5.6. **Withholding Indemnification and Reimbursement**. Notwithstanding anything in this Agreement to the contrary, if an action (including but not limited to any assignment or sublicense of its rights or obligations under this Agreement, or any failure to comply with applicable Laws or filing or record retention requirements) by a Party leads to the imposition of withholding Tax liability or VAT on the other Party that would not have been imposed in the absence of such action or in an increase in such liability above the liability that would have been imposed in the absence of such action, such Party will indemnify and hold harmless the other Party from any such additional or increased withholding Tax liability or VAT (except to the extent that the other Party can reclaim it, *provided that* such other Party will be reimbursed for any reasonable out of pocket costs incurred in the reclaim).

11.6.6. **Blocked Payments**. In the event that, by reason of applicable Law in any country, it becomes impossible or illegal for a Party to transfer, or have transferred on its behalf, payments owed the other Party hereunder, such Party will promptly notify the other Party of the conditions preventing such transfer and such payments will be deposited in local currency in the relevant country to the credit of the other Party in a recognized banking institution designated by the other Party or, if none is designated by the other Party within a period of thirty (30) days, in a recognized banking institution selected by the transferring Party, as the case may be, and identified in a written notice given to the other Party.

11.6.7. **Interest Due**. Each paying Party will pay the other Party interest on any undisputed payments that are not paid on or before the date such payments are due under this Agreement at the [***].

11.7. **Mutual Convenience.** The Category 2 Royalty and other payment obligations set forth in this Agreement have been agreed to by the Parties for the purpose of reflecting and advancing their mutual convenience, including the ease of calculating and paying royalties and other amounts to each Party.

12. CONFIDENTIALITY AND PUBLICATION

12.1. Nondisclosure and Non-Use Obligations.

12.1.1. All Confidential Information disclosed by one Party to the other Party under this Agreement and the Equity Agreements will, during the Term and for a period of ten (10) years thereafter, be maintained in confidence by the receiving Party and will not be disclosed to a Third Party or used for any purpose except to exercise its licenses and other rights, to perform its obligations, or as otherwise set forth herein, without the prior written consent of the disclosing Party. The existence and terms of this Agreement, the Equity Agreements, and the Joint Collaboration IP are the Confidential Information of each Party. All information exchanged between the Parties regarding the Prosecution and Maintenance and enforcement and defense of the Patents under Section 15 (Intellectual Property) will be the Confidential Information of the disclosing Party. The other Wave Know-How and all reports delivered by Wave hereunder regarding the Exploitation of Collaboration Compounds, Collaboration Products, and Companion Diagnostic directed to any Collaboration Targets will be the Confidential Information of Wave and the other Takeda Know-How and all reports delivered by Takeda hereunder regarding the Exploitation of Collaboration Compounds, Collaboration Products, and Companion Diagnostic directed to any Collaboration Targets and all Royalty reports delivered by Takeda hereunder will be the Confidential Information of Takeda. The Joint Collaboration Know-How will be the Confidential Information of each Party. Notwithstanding anything to the contrary set forth in this Agreement, during the Term each Party will use at least the same degree of care to protect the secrecy of the Know-How and unpublished Patents exclusively licensed to the other Party hereunder that it uses to prevent the disclosure of its own other confidential information of similar importance and in any event a reasonable duty of care.

12.1.2. **Exceptions to Confidentiality**. The obligations of nondisclosure and non-use set forth in Section 12.1 (Nondisclosure and Non-Use Obligations) will not apply to the extent that such Confidential Information:

12.1.2.1. is known by the receiving Party at the time of its receipt, and not through a prior disclosure by the disclosing Party, as documented by the receiving Party's business records;

12.1.2.2. is known to the public before its receipt from the disclosing Party, or thereafter becomes generally known to the public through no breach of this Agreement by the receiving Party;

12.1.2.3. is subsequently disclosed to the receiving Party by a Third Party who is not known by the receiving Party to be under an obligation of confidentiality to the disclosing Party; or

12.1.2.4. is developed by the receiving Party independently of Confidential Information received from the disclosing Party, as documented by the receiving Party's business records.

12.1.3. **Permitted Disclosures**. Notwithstanding the obligations of confidentiality and non-use set forth above, a receiving Party may provide Confidential Information disclosed to it, and disclose the existence and terms of this Agreement or the Equity Agreements as may be reasonably required in order to perform its obligations and to exploit its licenses and other rights under this Agreement, and specifically to (a) Related Parties, and their employees, directors, agents, consultants, or advisors to the extent necessary for the potential or actual performance of its obligations or exercise of its licenses and other rights under this Agreement in each case who are under an obligation of confidentiality with respect to such information that is no less stringent than the terms of this Section 12.1.3 (Permitted Disclosures); (b) Governmental Authorities or other Regulatory Authorities in order to obtain patents or perform its obligations or exploit its rights under this Agreement, *provided that* such Confidential Information will be disclosed only to the extent reasonably necessary to do so, and where permitted, subject to confidential treatment; (c) the extent required by Law, including by the rules or regulations of the United States Securities and Exchange Commission or similar regulatory agency in a country other than the United States or of any stock exchange or listing entity; (d) with respect to the terms of this Agreement and the Equity Agreements only, any *bona fide* actual or prospective acquirers, underwriters, investors, lenders, or other financing sources and any *bona fide* actual or prospective collaborators, licensors, Sublicensees, licensees, or strategic partners and to employees, directors, agents, consultants, and advisers of any such Third Party, in each case, who are under obligations of confidentiality and non-use with respect to such information that is no less stringent than the terms of this Section 12.1.3 (Permitted Disclosures) (but of duration customary in confidentiality agreements entered into for a similar purpose); and (e) to Third Parties to the extent a Party is required to do so pursuant to the terms of an In-License. If a Party is required by Law to disclose Confidential Information of the other Party that is subject to the confidentiality or non-disclosure provisions of this Section 12 (Confidentiality and Publication), then such Party will promptly inform the other Party of the disclosure that is being sought in order to provide the other Party an opportunity to challenge or limit

the disclosure. Notwithstanding Section 12.1.2 (Exceptions to Confidentiality), Confidential Information that is permitted or required to be disclosed will remain otherwise subject to the confidentiality and non-use provisions of this Section 12.1.3 (Permitted Disclosures). If either Party concludes that a copy of this Agreement must be filed with the United States Securities and Exchange Commission or similar regulatory agency in a country other than the United States, then such Party will, a reasonable time prior to any such filing, provide the other Party with a copy of such agreement showing any provisions hereof as to which the Party proposes to request confidential treatment, will provide the other Party with an opportunity to comment on any such proposed redactions and to suggest additional redactions, and will take such Party's reasonable comments into consideration before filing such agreement and use Commercially Reasonable Efforts to have terms identified by such other Party afforded confidential treatment by the applicable regulatory agency.

12.1.4. **Outside this Agreement**. Except as set in Section 13.6 (Exclusivity; Competing Programs) and this Section 12 (Confidentiality and Publication), nothing in this Agreement will prevent either Party from Exploiting, alone or with one or more Third Parties, any Oligonucleotides outside the scope of this Agreement at any time during the Term or thereafter.

12.1.5. **Publication and Publicity**.

12.1.5.1. **Publication**. Except for disclosures permitted in accordance with Section 12.1.3 (Permitted Disclosures), either Party wishing to make a publication or public presentation that contains the Confidential Information of the other Party or any results of Development or Commercialization activities under this Agreement will deliver to the other Party a copy of the proposed written publication or presentation at least forty-five (45) days prior to submission for publication or presentation. The reviewing Party will have the right to (a) propose modifications to the publication or presentation for patent reasons or trade secret reasons or to remove Confidential Information of the reviewing Party or its Related Parties, and the publishing Party will remove all Confidential Information of the reviewing Party if requested by the reviewing Party and otherwise use good faith efforts to reflect such Party's reasonable comments, or (b) request a reasonable delay in publication or presentation in order to protect patentable information. If the reviewing Party requests a delay to enable the reviewing Party to file patent applications protecting such Party's right in such information, then the publishing Party will delay such submission or presentation for a period of ninety (90) days (or such shorter period as may be mutually agreed by the Parties). With respect to any proposed publications or disclosures by investigators or academic or non-profit collaborators, such materials will be subject to review under this Section 12.1.5 (Publication) to the extent that Takeda or Wave, as the case may be, has the right and ability to do so (after using Commercially Reasonable Efforts to obtain such right and ability). Neither Party will submit or publish any article or other publication to or with any scientific journal or other publisher that requires, as a condition of publication, that the submitting Party agree to make available to the publisher or Third Parties any Materials that are the subject of the publication. All publications

relating to any Collaboration Target, Collaboration Compound, Collaboration Product, or Companion Diagnostic directed to any Collaboration Target, in each case, will be prepared, presented, and published in accordance with pharmaceutical industry accepted guidelines including: (a) International Committee of Medical Journal Editors (ICMJE) guidelines, (b) Uniform Requirements for Manuscripts Submitted to Biomedical Journals: Writing and Editing for Biomedical Publication, (c) Pharmaceutical Research and Manufacturers of America (PhRMA) guidelines, and (d) Principles on Conduct of Clinical Trials.

12.1.6. **Publicity**. Except as set forth in Section 12.1.2 (Exceptions to Confidentiality), 12.1.5 (Publication) or 12.2 (Press Release), the terms of this Agreement and the Equity Agreements, respectively, may not be disclosed by either Party. Neither Party will use the name, Trademark, trade name or logo of the other Party or its employees in any publicity, news release or disclosure relating to this Agreement, the Equity Agreements, such agreements' subject matter, or the activities of the Parties hereunder, in each case, without the prior express written permission of the other Party, except (a) as may be required by applicable Law, including by the rules or regulations of the United States Securities and Exchange Commission or similar regulatory agency in any country other than the United States or of any stock exchange or listing entity, p*rovided that* the Party making such disclosure or use of the name, Trademark, trade name, or logo of the other Party or its employees, gives the other Party reasonable prior written notice and otherwise complies with Section 12.1.3 (Permitted Disclosures), or (b) as expressly permitted by the terms hereof.

12.2. Press Release.

12.2.1. **By Either Party**. Wave will make an individual public announcement substantially in the form as the press release attached hereto as Schedule 12.2.1(a). Takeda will make an individual public announcement substantially in the form as the press attached hereto as Schedule 12.2.1(b). Following such initial press releases, except as provided in Section 12.1.6 (Publicity) or this Section 12.2.1 (By Either Party), neither Party will issue any press release or public announcement relating to this Agreement without the prior written approval of the other Party (such approval not to be unreasonably withheld), except that a Party may (a) once a press release or other public statement is approved in writing by both Parties, make subsequent public disclosure of the information contained in such press release or other written statement without the further approval of the other Party (so long as such information remains true and correct), and (b) issue a press release or public announcement as required by applicable Law (including a press release corresponding to any securities disclosure, such as pursuant to a Form 8-K), including by the rules or regulations of the United States Securities and Exchange Commission or similar regulatory agency in a country other than the United States or of any stock exchange or listing entity, *provided that* the Party issuing such press release gives reasonable prior notice to the other Party of and the opportunity to comment on the press release or public announcement, and otherwise complies with this Section 12 (Confidentiality and Publication).

12.2.2. **Activities under this Agreement**. Notwithstanding anything in this Section 12.2 (Press Release) to the contrary, Takeda may issue a press release or make a public disclosure relating to its (a) Development or Manufacture of any Licensed Compound,

Licensed Product, or Companion Diagnostic directed to any Licensed Target under this Agreement for which it is the Development Lead or Manufacturing Lead (as applicable) and (b) Commercialization of any Licensed Compound, Licensed Product, or Companion Diagnostic directed to any Licensed Target; *provided that* such press release or public disclosure does not disclose Confidential Information of Wave. Prior to making any such disclosure under this Section 12.2.2 (Activities under this Agreement), however, Takeda will provide Wave with a draft of such proposed disclosure within a reasonable time (but at least five (5) Business Days) prior to disclosure for Wave's review and comment, and Takeda will consider in good faith any timely comments provided by Wave (and will remove all Confidential Information of the reviewing Party if requested by Wave).

12.3. **Firewall Procedures.** During the Term, Takeda will, and will cause any of its Affiliates and Sublicensees to, (a) use good **faith** efforts to ensure any individuals performing activities under this Agreement (excluding any personnel at or above appropriate supervisory level) are different from those performing any research, development, or commercialization activities internally or for any Third Party relating to the research, development, or commercialization of [***]; (b) use diligent efforts to ensure that no Confidential Information of Wave or its Affiliates is used by, provided or otherwise disclosed to any such individual that is engaged in any such activity outside of this Agreement or to any such Third Party, in each case, as described in subclause (a), including by establishing reasonable firewall protections and such other safeguards as may be provided under Takeda's standard operating procedures; and (c) not disclose, use, or practice any of the Wave Technology outside the scope of the licenses and rights granted under this Agreement.

13. REPRESENTATIONS, WARRANTIES AND COVENANTS

13.1. **Mutual Representations and Warranties as of the Execution Date.** Each Party represents and warrants to the other Party, as of the Execution Date, that:

13.1.1. such Party is a corporation duly organized, validly existing, and in good standing under the Laws of its jurisdiction of incorporation or formation;

13.1.2. such Party has all requisite corporate power and corporate authority to enter into this Agreement and to carry out its obligations under this Agreement;

13.1.3. all requisite corporate action on the part of such Party, its directors and stockholders required by applicable Law for the authorization, execution and delivery by such Party of this Agreement, and the performance of all obligations of such Party under this Agreement, has been taken;

13.1.4. the execution, delivery and performance of this Agreement, and compliance with the provisions of this Agreement, by such Party do not and will not: (a) violate any provision of applicable Law or any ruling, writ, injunction, order, permit, judgment or decree of any Governmental Authority, (b) constitute a breach of, or default under (or an event which, with notice or lapse of time or both, would become a default under) or conflict with, or give rise to any right of termination, cancellation or acceleration of, any agreement, arrangement or instrument, whether written or oral, by which such Party or any of its assets are bound, or (c) violate or conflict with any of the provisions of such Party's organizational documents (including any articles or memoranda of organization or association, charter, bylaws or similar documents); and

13.1.5. no consent, approval, authorization or other order of, or filing with, or notice to, any Governmental Authority or other Third Party is required to be obtained or made by such Party in connection with the authorization, execution and delivery by such Party of this Agreement, except as required pursuant to the HSR Act.

13.2. Representations and Warranties by Wave. Wave represents and warrants to Takeda, as of the Execution Date that:

13.2.1. **Wave Patents and In-Licenses**. Schedule 13.2.1 sets forth a complete and accurate list of (a) all Wave Patents issued or pending as of the Execution Date, including (i) for each such Patent that is owned by Wave, whether it is solely or jointly owned, and, further if jointly owned, the identity of the Third Party joint-owner(s), and (ii) for each such Patent that is in-licensed by Wave, the identity of the Third Party owner, the corresponding Existing Wave In-License or Collaboration In-License, as applicable pursuant to which such Patent is Controlled by Wave, and whether such Patent is licensed to Wave exclusively or non-exclusively; and (b) all license, assignment, distribution, or other agreements pursuant to which Wave Controls (or has the right to obtain Control of), or otherwise is granted rights to, any Wave Technology, including all Existing Wave In-Licenses. Wave has provided Takeda with true and correct copies of all such agreements (subject to Wave's right to redact Confidential Information of Wave or its counterparty from such copies, except to the extent that such information is required in order for Takeda to identify the obligations with which it or its Related Parties will be required to comply).

13.2.2. **Wave Technology**. Wave has (a) sufficient legal or beneficial title and ownership of, or sufficient license rights under, or has a valid option to obtain sufficient license rights under, all Wave Technology; and (b) has sufficient legal or beneficial title and ownership of, or sufficient license rights under, or an option to obtain sufficient rights, and authority to (i) grant to Takeda and its Related Parties, the licenses, and other rights set forth in this Agreement under the Wave Technology; and (ii) use, disclose, and commercially exploit, and to enable Takeda and its Related Parties to use, disclose, and commercially exploit (in each case under appropriate conditions of confidentiality) the Wave Technology in the Field. Without limiting the generality of the foregoing, Wave has obtained all necessary consents and fulfilled all necessary conditions applicable to Wave (and other than those conditions required to be flowed through to Takeda), if any, to sublicense to Takeda under this Agreement all Wave Technology.

13.2.3. **Conflicting Agreements**. Wave has not granted its Affiliates or any Third Party, including any academic organization or agency, rights that would otherwise interfere or be inconsistent with Takeda's rights hereunder, and there are no agreements or arrangements to which Wave or any of its Affiliates is a party relating to Wave Technology or Collaboration Compounds, Collaboration Products, or Companion Diagnostics directed to any Collaboration Target, that would (a) limit the rights granted to Takeda under this Agreement or (b) restrict or result in a restriction on Takeda's ability to Exploit the Collaboration Compounds, Collaboration Products, or Companion Diagnostics directed to any Collaboration Target in accordance with this Agreement in the Territory.

13.2.4. **Breach of Existing Wave In-License**. Neither Wave nor its Affiliates are in material breach or default under any Existing Wave In-License pursuant to which Wave Controls any Wave Technology, and neither Wave nor its Affiliates have received any written notice of material breach or default with respect to any such Existing Wave In-License.

13.2.5. **Ownership of Wave Technology**. With respect to any Wave Technology owned by Wave, (a) Wave and its Affiliates have obtained from all employees and independent contractors who participated in any respect in the invention or authorship thereof, valid and enforceable assignments of all ownership rights of such employees and independent contractors in such Wave Technology, either pursuant to written agreement or by operation of Law; and (b) all of its employees, officers, contractors and consultants have executed agreements or have existing obligations under applicable Law requiring assignment to Wave or its Affiliate, as applicable, of all rights, title, and interests in and to inventions made during the course of and as the result of this Agreement; and, no officer or employee of Wave or its Affiliate is subject to any agreement with any other Third Party that requires such officer or employee to assign any interest in any Wave Technology to any Third Party.

13.2.6. **Wave Confidential Information**. All employees, officers, and consultants of Wave and its Affiliates have executed agreements or have existing obligations under applicable Law and obligating the individual to maintain as confidential Wave's Confidential Information as well as confidential information of other parties (including of Takeda and its Affiliates) that such individual may receive in the conduct of this Agreement, to the extent required to support Wave's obligations under this Agreement; and Wave and its Affiliates have taken all reasonable precautions to preserve the confidentiality of the Wave Know-How.

13.2.7. **Government Funding**. Neither Wave nor its Affiliates have entered into a government funding relationship that would result in rights to any Collaboration Compound, Collaboration Product, or Companion Diagnostic directed to any Collaboration Target residing in the US Government, National Institutes of Health, National Institute for Drug Abuse or other agency, and the licenses granted hereunder are not subject to overriding obligations to the US Government as set forth in Public Law 96 517 (35 U.S.C**.** 200 204), as amended, or any similar obligations under the laws of any other country.

13.2.8. **Validity and Enforceability**. Wave does not know of any facts as to why any of the Patents that are owned by Wave or the Wave Patents that are exclusively licensed to Wave, in each case, are not, or, upon issuance, will not be, valid and enforceable patents. There are no oppositions, nullity actions, interferences, *inter-partes* reexaminations, *inter-partes* reviews, post-grant reviews, derivation proceedings, or other proceedings pending or threatened (but excluding office actions or similar communications issued by any Patent Offices in the ordinary course of prosecution of any patent application) that challenge the scope, validity, or enforceability of the Wave Patents owned by Wave or, to Wave's knowledge, the Wave Patents that are exclusively licensed to Wave. Wave has filed and prosecuted patent applications within the Wave Patents owned by Wave in good faith and, to Wave's knowledge, has complied with all duties of disclosure with respect thereto. To Wave's knowledge, Wave has not committed any act, or omitted to commit any act, that may cause the

Wave Patents owned by Wave (or, to Wave's knowledge, any Wave Patents that are exclusively licensed to Wave) to expire prematurely or be declared invalid or unenforceable. To Wave's knowledge, Wave or its Affiliates have timely paid all application, registration, maintenance, and renewal fees in respect of the Wave Patents owned by Wave and have filed with the United States Patent and Trademark Office or any analogous foreign Governmental Authority (collectively, "**Patent Offices**") all necessary documents and certificates for the purpose of maintaining such Wave Patents.

13.2.9. **No Claims**. The owned Wave Technology and, to Wave's knowledge, the in-licensed Wave Technology is not subject to, any judgment or settlement that would reasonably be expected to materially restrict the use thereof or otherwise would reasonably be expected to adversely affect the validity or enforceability thereof.

13.2.10. **Non-Infringement**. To Wave's knowledge, the Exploitation by Wave or its Related Parties of any Candidate Category 1 Compound, Candidate Category 1 Product, or Companion Diagnostic directed to any Collaboration Target, in each case, as formulated and Manufactured as of the Execution Date does not infringe any valid, issued patent of any Third Party. There are no claims, demands, suits, proceedings, arbitrations, or other legal actions of any nature, civil, criminal, regulatory or otherwise, pending or, to Wave's knowledge, threatened against Wave or any of its Related Parties alleging or asserting any of the foregoing.

13.2.11. **Compliance with Laws**. Wave has conducted the Development and Manufacture of each Candidate Category 1 Compound, Candidate Category 1 Product, and Companion Diagnostic directed to any Collaboration Target in compliance with all applicable Laws, including current governmental regulations concerning, GLP, GCP, and cGMP.

13.3. **Additional Wave Representations and Warranties as of the Option Notice Date.** On a Candidate Category 1 Target-by-Candidate Category 1 Target basis, Wave represents and warrants to Takeda that, on the date of delivery to Takeda of the Option Notice for such Category 1 Development Program (the "**Option Notice Date**"), except as set forth in the disclosure letter delivered to Takeda on the Option Notice Date as part of such Option Notice (the "**Disclosure Letter**"), as to the **particular** Lead Category 1 CP and any other Candidate Category 1 Compounds, Candidate Category 1 Products, and Companion Diagnostics directed to the applicable Candidate Category 1 Target that are specifically identified in the relevant Option Notice (the "**Named Candidate Category 1 Compounds**," "**Named Candidate Category 1 Products**," and "**Named Companion Diagnostics**," respectively):

13.3.1. **Wave Technology**. Schedule 13.3.1 of the Disclosure Letter sets forth a complete and accurate list of the Patents within the Wave Technology Covering the Lead Category 1 CP and any Named Candidate Category 1 Products, including (a) for each such Patent that is owned by Wave, whether it is solely or jointly owned, and, further if jointly owned, the identity of the Third Party joint-owner(s), and (b) for each such Patent that is in-licensed by Wave, the identity of the Third Party owner, the corresponding Existing Wave In-License or Collaboration In-License, as applicable, pursuant to which such Patent is Controlled by Wave and whether such Patent is licensed to Wave exclusively or non-exclusively (collectively, the "**Candidate Target Patents**").

13.3.2. **Existing Wave In-Licenses**. (a) Wave is the sole and exclusive owner of, or otherwise exclusively Controls pursuant to an Existing Wave In-License or Collaboration In-License, as applicable, all Candidate Target Patents and all Wave Know-How reasonably necessary to Exploit the Lead Category 1 CP and all other Named Candidate Category 1 Compounds, Named Candidate Category 1 Products, and Named Companion Diagnostics directed to the applicable Candidate Category 1 Target, and (b) Wave has the right to transfer any Know-How to Takeda for use in connection with the Exploitation of the Lead Category 1 CP and all other Named Candidate Category 1 Compounds, Named Candidate Category 1 Products, and Named Companion Diagnostics directed to the applicable Candidate Category 1 Target that Wave will transfer to Takeda in accordance with this Agreement in the event Takeda exercises the relevant Option with respect to such Candidate Category 1 Target (the Know-How described in (a) and (b), collectively, "**Candidate Target Know-How**") (together, the Candidate Target Know-How and the Candidate Target Patents, the "**Candidate Target Technology**"); *provided*, *however*, that the foregoing is not a representation or warranty of non-infringement, which representation is given solely in Section 13.3.10 (Non-Infringement).

13.3.3. **Candidate Target Technology**. Wave has sufficient legal or beneficial title and ownership of, or sufficient license rights under, the Candidate Target Technology to Control or otherwise grant the licenses and other rights under such Candidate Target Technology to Takeda pursuant to this Agreement. Without limiting the generality of the foregoing, Wave has obtained all necessary consents and fulfilled all necessary conditions applicable to Wave (and other than those conditions required to be flowed through to Takeda), if any, to sublicense to Takeda under this Agreement all Candidate Target Technology.

13.3.4. **Third Party Agreements**. Schedule 13.3.4 of the Disclosure Letter sets forth a complete and accurate list of all license, assignment, distribution, or other agreements pursuant to which Wave Controls (or has the right to obtain Control of) any, or otherwise is granted rights to, Candidate Target Technology, including all Existing Wave In-Licenses and Collaboration In-Licenses. Wave has provided Takeda with true and correct copies of all such agreements (subject to Wave's right to redact Confidential Information of Wave or its counterparty from such copies, except to the extent that such information is required in order for Takeda to identify the obligations with which it or its Related Parties will be required to comply).

13.3.5. **Candidate Target Patents**. Wave does not know of any facts as to why any of the Candidate Target Patents that are owned by Wave or the Candidate Target Patents that are exclusively licensed to Wave, in each case, are not, or, upon issuance, will not be, valid and enforceable patents. There are no oppositions, nullity actions, interferences, *inter-partes* reexaminations, *inter-partes* reviews, post-grant reviews, derivation proceedings, or other proceedings pending or threatened (but excluding office actions or similar communications issued by any Patent Offices in the ordinary course of prosecution of any patent application) that challenge the scope, validity, or enforceability of the Candidate Target Patents owned by Wave or, to Wave's knowledge, the Candidate Target Patents that are exclusively licensed to Wave. Wave has filed and prosecuted patent applications within the Candidate Target Patents owned by Wave in good faith and, to Wave's knowledge, has complied with all duties of disclosure with respect thereto. Wave has not committed any act, or omitted to commit

any act, that may cause the Candidate Target Patents owned by Wave (or to Wave's knowledge, any Candidate Target Patents that are exclusively licensed to Wave) to expire prematurely or be declared invalid or unenforceable. To Wave's knowledge, Wave or its Affiliates have timely paid all application, registration, maintenance, and renewal fees in respect of the Candidate Target Patents owned by Wave and have filed with the Patent Offices all necessary documents and certificates for the purpose of maintaining such Candidate Target Patents.

13.3.6. **Breach of Existing Wave In-License**. Neither Wave nor its Affiliates are in material breach or default under any Existing Wave In-License or Collaboration In-License, as applicable, entered into prior to the Option Notice Date pursuant to which Wave Controls any Candidate Target Technology, and neither Wave nor its Affiliates have received any written notice of material breach or default with respect to any such Existing Wave In-License or Collaboration In-License entered into prior to the Option Notice Date.

13.3.7. **IP Assignment**. With respect to any Candidate Target Technology owned by Wave, Wave and its Affiliates have obtained from all employees and independent contractors who participated in any respect in the invention or authorship thereof, valid and enforceable assignments of all ownership rights of such employees and independent contractors in such Wave Technology, either pursuant to written agreement or by operation of Law.

13.3.8. **Government Funding**. Neither Wave nor its Affiliates have entered into a government funding relationship that would result in rights to any Named Candidate Category 1 Compound, Named Candidate Category 1 Product, or Named Companion Diagnostic directed to the applicable Candidate Category 1 Target residing in the US Government, National Institutes of Health, National Institute for Drug Abuse or other agency, and the licenses granted hereunder are not subject to overriding obligations to the US Government as set forth in Public Law 96 517 (35 U.S.C. 200 204), as amended, or any similar obligations under the laws of any other country.

13.3.9. **No Claims**. The owned Candidate Target Technology and, to Wave's knowledge, the in-licensed Candidate Target Technology is not subject to any judgment or settlement that would reasonably be expected to materially restrict the use thereof or otherwise would reasonably be expected to adversely affect the validity or enforceability thereof.

13.3.10. **Non-Infringement**. Except as set forth in Schedule 13.3.10 of the Disclosure Letter, to Wave's knowledge, the Exploitation by Wave or its Related Parties of the Lead Category 1 CP and all other Named Candidate Category 1 Compounds, Named Candidate Category 1 Products, or Named Companion Diagnostics directed to the applicable Candidate Category 1 Target, in each case, as formulated and Manufactured as of the Option Notice Date does not infringe any valid issued patent of any Third Party. Except as set forth in Schedule 13.3.10 of the Disclosure Letter, there are no claims, demands, suits, proceedings, arbitrations, or other legal actions of any nature, civil, criminal, regulatory or otherwise, pending or, to Wave's knowledge, threatened against Wave or any of its Related Parties alleging or asserting any of the foregoing.

13.3.11. **Compliance with Laws**. Wave has conducted the Development of the Lead Category 1 CP and all other Named Candidate Category 1 Compounds, Named Candidate Category 1 Products, and Named Companion Diagnostics directed to the applicable Candidate Category 1 Target in compliance with all applicable Laws, including current governmental regulations concerning, GLP, GCP, and cGMP.

13.4. **Warranty Disclaimer.** EXCEPT AS OTHERWISE EXPRESSLY PROVIDED IN THIS AGREEMENT, NEITHER PARTY MAKES ANY REPRESENTATION OR EXTENDS ANY WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, TO THE OTHER PARTY WITH RESPECT TO ANY PATENTS, KNOW-HOW, MATERIALS, COMPOUND, PRODUCT, COLLABORATION COMPOUND, COLLABORATION PRODUCT, GOODS, SERVICES, RIGHTS OR OTHER SUBJECT MATTER OF THIS AGREEMENT AND HEREBY DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE OR NONINFRINGEMENT WITH RESPECT TO ANY AND ALL OF THE FOREGOING. EACH PARTY HEREBY DISCLAIMS ANY REPRESENTATION OR WARRANTY THAT THE EXPLOITATION OF ANY COLLABORATION COMPOUND, COLLABORATION PRODUCT, OR COMPANION DIAGNOSTIC DIRECTED TO ANY COLLABORATION TARGET PURSUANT TO THIS AGREEMENT WILL BE SUCCESSFUL.

13.5. **Certain Covenants.**

13.5.1. **Compliance**. Each Party and its Related Parties will conduct the Exploitation of the Collaboration Compounds, Collaboration Products, and Companion Diagnostics directed to any Collaboration Target in a good scientific manner and in accordance with all applicable Laws, including governmental regulations concerning GLP, GCP, and cGMP and any applicable anti-corruption or anti-bribery laws or regulations of any Governmental Authority with jurisdiction over the activities performed by such Party or its Related Parties in furtherance of such obligations. In addition, if either Party is or becomes subject to a legal obligation to a Regulatory Authority or other Governmental Authority (such as a corporate integrity agreement or settlement agreement with a Governmental Authority), then the other Party will perform such activities as may be reasonably requested by the obligated Party to enable the obligated Party to comply with its legal obligation to such Regulatory Authority with respect to the Collaboration Compounds, Collaboration Products, and Companion Diagnostics directed to any Collaboration Target.

13.5.2. **Retention of Title**. On a Collaboration Target-by-Collaboration Target basis, commencing upon the Execution Date and continuing (a) through the end of the Option Exercise Period for any such Candidate Category 1 Target, and (b) until the end of the Royalty Term for any Licensed Products directed to such Collaboration Target (if, for Category 1 Targets, Takeda exercises an Option with respect to such Candidate Category 1 Target), in each case, ((a) and (b)), Wave will retain Control of and will not sell, transfer, lease, encumber, or otherwise dispose of any Wave Technology related to such Collaboration Target, except with Takeda's prior written consent or as and to the extent expressly permitted by this Agreement or to grant a security interest or lien in or to any such Wave Technology as part of a secured financing transaction, unless such security interest or lien is subordinate to this Agreement and the licenses granted herein.

13.5.3. **Know-How**. On a Collaboration Target-by-Collaboration Target basis, commencing on the Execution Date Wave will obtain and retain Control of any Know-How that is used by Wave in the Exploitation of (as applicable) and Candidate Category 1 Compounds, Candidate Category 1 Products, Licensed Compounds, Licensed Products, and Companion Diagnostics directed to such Collaboration Target.

13.5.4. **Conflicting Transactions**. Commencing on the Execution Date and continuing until the end of the Term, Wave will not, and will cause its Affiliates not to, enter into any agreement granting a license or other right under the Wave Technology that is inconsistent with the options and rights granted to Takeda under this Agreement. Commencing on the Execution Date and continuing until the end of the Term, Takeda will not, and will cause its respective Affiliates not to, enter into any agreement granting a license or other right under the Takeda Technology that is inconsistent with the rights granted to Wave under this Agreement.

13.5.5. **In-Licenses**. Commencing on the Execution Date and continuing until the end of the Term, the Granting Party will maintain Control of all Patents, and Know-How licensed to such Party under the In-Licenses to which such Party is the contracting party that would be necessary or reasonably useful for the other Party to Exploit any Collaboration Compounds, Collaboration Products, or Companion Diagnostics directed to any Collaboration Target in the Field in the Territory pursuant to this Agreement. The Granting Party will not materially breach or be in material default under any of its obligations under any In-License to which such Party is the contracting party that would be necessary or reasonably useful for the Non-Granting Party to Exploit any Collaboration Compounds, Collaboration Products, and Companion Diagnostics directed to any Collaboration Target in the Field in the Territory pursuant to this Agreement. The Granting Party will not terminate any In-License in a manner that would terminate rights that are sublicensed to the other Party hereunder or otherwise diminish the scope or exclusivity of the licenses granted to a Party under the technology licensed to such Party hereunder. In the event that a Granting Party receives notice of an alleged breach by such Granting Party under an In-License to which it is a party, where termination of such In-License or any diminishment of the scope or exclusivity of the licenses granted to the Non-Granting Party by the Granting Party under the applicable technology licensed hereunder is being or could be sought by the counterparty, then such Party will promptly, but in no event less than five (5) days thereafter, provide written notice thereof to the other Party and grant the other Party the right (but not the obligation) to cure such alleged breach. In the event that a Granting Party intends to materially amend an In-License to which it is a party that is necessary or reasonably useful for the other Party to Exploit any Collaboration Compounds, Collaboration Products, or Companion Diagnostics directed to any Collaboration Target in the Territory pursuant to this Agreement, then such Granting Party will promptly, but in no event less than ten (10) Business Days before, provide written notice thereof to the Non-Granting Party. Such Non-Granting Party will have the right (but not the obligation), acting reasonably, to reject any amendment that would increase the Non-Granting Party's obligations under this Agreement (including any financial obligations) or decrease the licenses or rights granted to the Non-Granting Party under this Agreement and in the event of any such rejection, the Granting Party will not enter into any such amendment unless and until the Non-Granting Party does not reject any such amendment.

13.5.6. **Stand-by Licenses**. During the Term, if a Non-Granting Party reasonably requests, then the Granting Party will reasonably cooperate in good faith with the Non-Granting Party's efforts to obtain one or more stand-by license agreements with respect to the Granting Party's In-Licenses, pursuant to which, upon termination of the relevant In-License, the Non-Granting Party would receive a direct license from the applicable Third Party licensor under any Patents or Know-How that are sublicensed to the Non-Granting Party pursuant to this Agreement. Such stand-by license agreement will be in a form reasonably approved in advance by the Non-Granting Party. Any costs incurred by the Granting Party in cooperating with the Non-Granting Party's efforts to obtain any such stand-by license agreement will be reimbursed by the Non-Granting Party. The Parties hereby acknowledge and agree that notwithstanding the foregoing provisions of this Section 13.5.6 (Stand-by Licenses), [***].

13.5.7. **No Debarment**. Each Party will use Commercially Reasonable Efforts to not use, in any capacity in connection with the performance of its obligations under this Agreement, any Person that has been debarred pursuant to Section 306 of the FD&C Act, as amended, or that is the subject of a conviction described in such section. Each Party agrees to inform the other Party in writing immediately if it or any Person that is performing activities under this Agreement, is debarred or is subject to debarment or is the subject of a conviction described in Section 306 of the FD&C Act, or if any action, suit, claim, investigation or legal or administrative proceeding is pending or, to the best of the notifying Party's knowledge, is threatened, relating to the debarment or conviction of the notifying Party or any Person or entity used in any capacity by such Party or any of its Affiliates with respect to this Agreement or the performance of its other obligations under this Agreement.

13.6. Exclusivity; Competing Programs.

13.6.1. **Exclusivity**.

13.6.1.1. **Wave Covenant**. On a Collaboration Target-by-Collaboration Target basis, except as permitted under this Agreement:

(a) during the Term of this Agreement with respect to a Collaboration Target until the expiration or termination of the Agreement in its entirety or with respect to such Collaboration Target, Wave will not, [***]; or

(b) during the Initial Licensed Category 2 Research Term, Wave will not, alone or with any Affiliates or Third Parties, without Takeda's prior written approval, [***].

13.6.1.2. **Takeda Covenant**. On a Collaboration Target-by-Collaboration Target basis, except as permitted under this Agreement, during the Term of this Agreement with respect to a Collaboration Target until the expiration or termination of the Agreement in its entirety or with respect to such Collaboration Target, Takeda will not, alone or with any Affiliates or Third Parties, [***].

13.6.1.3. **Exception**. The Parties hereby acknowledge and agree that (a) each Party's obligations under this Section 13.6.1 (Exclusivity) will not apply to [***].

13.6.2. **Wave Change of Control**. Notwithstanding Section 13.6.1 (Exclusivity), if a Change of Control occurs with respect to Wave or its parent Affiliate with an Acquirer, and the Acquirer (or any of such Acquirer's successors or assigns, other than Wave and its Affiliates as of the Change of Control) as of the Change of Control, or later, has a program or product (or rights thereto) that would otherwise violate Section 13.6.1 (Wave Covenant) (each, an "**Wave COC Program**"), then (a) Section 13.6.1 (Wave Covenant) will not apply with respect to such Wave COC Program, and (b) such Third Party, or any of such Third Party's Affiliates or any successors or assigns of such Third Party or such Third Party's Affiliates, as applicable, will be permitted to pursue, and continue such Wave COC Program after such Change of Control and such pursuit and continuation will not constitute a violation of Section 13.6.1 (Exclusivity); *provided that* [***].

13.6.3. **Wave Acquisition**. In addition, notwithstanding Section 13.6.1 (Exclusivity), during the Term, if (a) Wave or its Affiliate acquires a Third Party (by merger, sale, consolidation, reorganization, or otherwise) so that such Third Party becomes an Affiliate over which Wave or its Affiliate has control, or (b) Wave or its Affiliate acquires all or substantially all of the assets of a Third Party (including any subsidiaries or divisions thereof) (each of (a) and (b), a "**Wave Acquisition**"), and, in each case, the Third Party (or any of such Third Party's Affiliates or any successors or assigns of such Third Party or such Third Party's Affiliates, other than Wave and its Affiliates as of the Wave Acquisition) already has, or the acquired assets contain, as applicable, a program or product that existed prior to the Wave Acquisition that would otherwise violate any of Section 13.6.1 (Exclusivity) (a "**Wave Acquisition Program**"), then Wave or such Affiliate will elect whether to (i) divest its rights to such Wave Acquisition Program, or (ii) cease the clinical Development and Commercialization of such Wave Acquisition Program, and will provide Takeda written notice of the existence of such Wave Acquisition Program and such decision within ninety (90) days after the closing of such Wave Acquisition. If Wave provides notice as described in clause (i) of the preceding sentence, then Wave, and its Affiliates if applicable, will divest such Wave Acquisition Program within two (2) years after the closing of the applicable Wave Acquisition, and if Wave provides notice that it will terminate such Wave Acquisition Program as described in clause (ii) of the preceding sentence, then Wave, and its Affiliates if applicable, will cease the clinical Development and Commercialization of such Wave Acquisition Program as soon as reasonably practicable and in any event within ninety (90) days of the closing of the applicable Wave Acquisition, giving due consideration to ethical concerns and requirements under applicable Law and any agreements with Third Parties.

13.6.4. **Takeda Change of Control**. Notwithstanding Section 13.6.1 (Exclusivity), if a Change of Control occurs with respect to Takeda or its parent Affiliate with an Acquirer, and the Acquirer (or any of such Third Party's successors or assigns, other than Takeda and its Affiliates as of the Change of Control) as of the Change of Control, or later, has a program or product (or rights thereto) that would otherwise violate Section 13.6.1.2 (Takeda Covenant) (each, an "**Takeda COC Program**"), then (a) Section 13.6.1.2 (Takeda Covenant) will not apply with respect to such Takeda COC Program, and (b) such Third Party, or any of such Third Party's Affiliates or any successors or assigns of such Third Party or such Third Party's Affiliates, as applicable, will be permitted to pursue and continue such Takeda COC Program after such Change of Control and such pursuit and continuation will not constitute a violation of Section 13.6.1 (Exclusivity); [***].

13.6.5. **Takeda Acquisition.** In addition, notwithstanding Section 13.6.1 (Exclusivity), during the Term, if (a) Takeda or its Affiliate acquires a Third Party (by merger, sale, consolidation, reorganization, or otherwise) so that such Third Party becomes an Affiliate over which Takeda or its Affiliate has control, or (b) Takeda or its Affiliate acquires all or substantially all of the assets of a Third Party (including any subsidiaries or divisions thereof) (each of (a) and (b), a "**Takeda Acquisition**"), and, in each case, the Third Party (or any of such Third Party's Affiliates or any successors or assigns of such Third Party or such Third Party's Affiliates, other than Takeda and its Affiliates as of the Takeda Acquisition) already has, or the acquired assets contain, as applicable, a program or product that existed prior to the Takeda Acquisition that would otherwise violate any of Section 13.6.1 (Exclusivity) (a "**Takeda Acquisition Program**"), then Takeda or such Affiliate will elect whether to (i) divest its rights to such Takeda Acquisition Program, or (ii) cease the clinical Development and Commercialization of such Takeda Acquisition Program, and will provide Wave written notice of the existence of such Takeda Acquisition Program and such decision within ninety (90) days after the closing of such Wave Acquisition. If Takeda provides notice as described in clause (i) of the preceding sentence, then Takeda, and its Affiliates if applicable, will divest such Takeda Acquisition Program within two (2) years after the closing of the applicable Takeda Acquisition, and if Takeda provides notice that it will terminate such Takeda Acquisition Program as described in clause (ii) of the preceding sentence, then Takeda, and its Affiliates if applicable, will cease the clinical Development and Commercialization of such Takeda Acquisition Program as soon as reasonably practicable and in any event within ninety (90) days of the closing of the applicable Takeda Acquisition, giving due consideration to ethical concerns and requirements under applicable Law and any agreements with Third Parties.

14. INDEMNIFICATION; LIMITATION OF LIABILITY; INSURANCE

14.1. **General Indemnification by Takeda.** Takeda will indemnify, hold harmless, and defend Wave, its Related Parties, and their respective directors, officers, employees, and agents ("**Wave Indemnitees**") from and against any and all Third Party claims, suits, losses, liabilities, damages, costs, fees, and expenses (including reasonable attorneys' fees and litigation expenses) (collectively, "**Losses**") arising out of or resulting from, directly, or indirectly, (a) any breach of, or inaccuracy in, any representation or warranty made by Takeda in this Agreement, or any breach or violation of any covenant or agreement of Takeda in, or in the performance of, this Agreement, (b) the negligence or willful misconduct by or of Takeda and any of its Related Parties, or any of their respective directors, officers, employees or agents in the performance of Takeda's obligations under this Agreement, or (c) to the extent such Losses arise out of the Exploitation of Licensed Compounds, Licensed Products, or Companion Diagnostics directed to any Licensed Products by or on behalf of Takeda or any of its Related Parties. Notwithstanding the foregoing, Takeda will have no obligation to indemnify the Wave Indemnitees to the extent that the Losses arise out of or result from, directly or indirectly, matters for which Wave is obligated to indemnify Takeda under Section 14.2 (General Indemnification by Wave) or Section 14.3 (Category 1 Third Party Losses).

14.2. **General Indemnification by Wave.** Wave will indemnify, hold harmless, and defend Takeda, its Related Parties and their respective directors, officers, employees and agents ("**Takeda Indemnitees**") from and against any and all Losses arising **out** of or resulting from, directly or indirectly, (a) any breach of, or inaccuracy in, any representation or warranty made by Wave in this Agreement, or any breach or violation of any covenant or agreement of Wave in, or in the

performance of, this Agreement, (b) the negligence or willful misconduct by or of Wave or any of its Related Parties, or any of their respective directors, officers, employees or agents in the performance of Wave's obligations under this Agreement, or (c) to the extent such Losses arise out of the Exploitation of Collaboration Compounds, Collaboration Products, or Companion Diagnostics directed to any Collaboration Target by or on behalf of Wave or any of its Related Parties. Notwithstanding the foregoing, Wave will have no obligation to indemnify the Takeda Indemnitees to the extent that the Losses arise out of or result from, directly or indirectly, matters for which Takeda is obligated to indemnify Wave under Sections 14.1 (General Indemnification by Takeda) or Section 14.3 (Category 1 Third Party Losses).

14.3. **Category 1 Third Party Losses.** Subject to any applicable Supply Agreement, any Losses arising out of Third Party claims arising from the Exploitation of any Licensed Category 1 Compound, Licensed Category 1 Product, or Companion Diagnostic directed to any Licensed Category 1 Target (other than Losses arising out of (a) any **breach** of, or inaccuracy in, any representation or warranty made by a Party in this Agreement, or any breach or violation of any covenant or agreement of a Party in this Agreement, or (b) the negligence or willful misconduct by or of such Party or any of its Related Parties, or any of their respective directors, officers, employees or agents in the performance of such Party's obligations under this Agreement) will be (i) borne by each Party, to the extent such Losses arise out of the Exploitation of Candidate Category 1 Compound, Candidate Category 1 Product, or Companion Diagnostic directed to any Candidate Category 1 Target by or on behalf of such Party or any of its Related Parties, and (ii) borne by the Development Lead, Manufacturing Lead, or Takeda (if related to Commercialization), to the extent such Losses arise out of the Exploitation of Licensed Category 1 Compound, Licensed Category 1 Product, or Companion Diagnostic directed to any Licensed Category 1 Target by on behalf of such Party or any of its Related Parties following Option exercise by Takeda; *provided that* any such Losses arising out from the Development or Commercialization of Licensed Category 1 Compound, Licensed Category 1 Product, or Companion Diagnostic directed to any Licensed Category 1 Target (including claims arising from Manufacture for such Development or Commercialization) will be treated as Eligible Development Expenses in accordance with Section 11.3.2 (Eligible Development Expenses for Licensed Category 1 Targets) or Eligible Commercialization Expenses in accordance with Section 11.3.4 (Licensed Category 1 Profit & Loss Share for Commercialization Activities), respectively. The Party bearing such Losses in accordance with the immediately preceding sentence will indemnify, hold harmless, and defend the other Party and its Related Parties and their respective directors, officers, employees and agents from and against such Losses.

14.4. **Indemnification Procedure.** The Party entitled to indemnification under this Section 14 (Indemnification; Limitation of Liability; Insurance) (an "**Indemnified Party**") will notify the Party responsible for such indemnification (the "**Indemnifying Party**") in writing promptly upon being notified of or having knowledge of any claim or claims asserted or threatened against the Indemnified Party that could give rise to a right of indemnification under this Agreement; *provided that* the failure to give such notice will not relieve the Indemnifying Party of its indemnity obligation hereunder except to the extent that such failure materially prejudices the Indemnifying Party. The Indemnifying Party will have the right to defend, at its sole cost and expense, any such claim by all appropriate proceedings; *provided that* the Indemnifying Party may not enter into any compromise or settlement unless (a) such compromise or settlement imposes only a monetary obligation on the Indemnifying Party and which includes as an unconditional term thereof, the giving by each claimant or plaintiff to the Indemnified Party of a release from all liability in respect of such claim; or (b) the Indemnified Party consents to such compromise or settlement, which consent will not be unreasonably withheld unless such

compromise or settlement involves (i) any admission of legal wrongdoing by the Indemnified Party, (ii) any payment by the Indemnified Party that is not indemnified under this Agreement, or (iii) the imposition of any equitable relief against the Indemnified Party (in which case, (i) through (iii), the Indemnified Party may withhold its consent to such settlement in its sole discretion). If the Indemnifying Party does not elect to assume control of the defense of a claim, then the Indemnified Party will have the right, at the expense of the Indemnifying Party, upon at least ten (10) Business Days' prior written notice to the Indemnifying Party of its intent to do so, to undertake the defense of such claim for the account of the Indemnifying Party (with counsel reasonably selected by the Indemnified Party and approved by the Indemnifying Party, such approval not to be unreasonably withheld); *provided that* the Indemnified Party will keep the Indemnifying Party apprised of all material developments with respect to such claim. The Indemnified Party may not enter into any compromise or settlement without the prior written consent of the Indemnifying Party, such consent not to be unreasonably withheld. The Indemnified Party will cooperate with the Indemnifying Party and may participate in, but not control, any defense or settlement of any claim controlled by the Indemnifying Party pursuant to this Section 14.4 (Indemnification Procedure) and will bear its own costs and expenses with respect to such participation; *provided that* the Indemnifying Party will bear such costs and expenses if counsel for the Indemnifying Party will have reasonably determined that such counsel may not properly represent both the Indemnifying Party and the Indemnified Party.

14.5. **Limitation of Liability.** NEITHER PARTY WILL BE LIABLE FOR SPECIAL, INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES ARISING OUT OF THIS AGREEMENT, OR THE EXERCISE OF ITS RIGHTS OR THE PERFORMANCE OF ITS OBLIGATIONS HEREUNDER, INCLUDING LOST PROFITS ARISING FROM OR RELATING TO ANY BREACH OF THIS AGREEMENT, REGARDLESS OF ANY NOTICE OF SUCH DAMAGES, EXCEPT AS A RESULT OF (A) A PARTY'S GROSS NEGLIGENCE OR WILLFUL MISCONDUCT, (B) BREACH OF ANY EXCLUSIVITY OBLIGATIONS ARISING PURSUANT TO SECTION 13.6 (EXCLUSIVITY; COMPETING PROGRAMS), (C) A BREACH OF SECTION 12 (CONFIDENTIALITY AND PUBLICATION), (D) A BREACH OF THE EXCLUSIVITY TERMS OF THE LICENSES GRANTED IN SECTION 10 (LICENSES), OR (E) WAVE'S BREACH OF SECTION 13.2.1 (WAVE PATENTS AND IN-LICENSES), SECTION 13.2.2 (WAVE TECHNOLOGY), SECTION 13.3.2 (EXISTING WAVE IN-LICENSES), OR SECTION 13.5.2 (RETENTION OF TITLE). NOTHING IN THIS SECTION 14.5 (LIMITATION OF LIABILITY) IS INTENDED TO LIMIT OR RESTRICT THE INDEMNIFICATION RIGHTS OR OBLIGATIONS OF EITHER PARTY UNDER THIS AGREEMENT.

14.6. **Insurance.** Commencing no later than the [***] under this Agreement, each Party will obtain and maintain insurance during the Term and for a period of at least [***], with a reputable, solvent insurer in an amount **appropriate** for its business and products of the type that are the subject of this Agreement, and for its obligations under this Agreement. Specifically, each Party will maintain (a) worker's compensation insurance with statutory limits in compliance with the worker's compensation laws of the state or states in which the Party has employees in the United States (excluding Puerto Rico), (b) [***] with a minimum limit of [***]; *provided that* a Party has employees in the United States (excluding Puerto Rico), and (c) [***] with a minimum limit of [***]. Upon request, each Party will provide the other Party with evidence of the existence and maintenance of such insurance coverage. [***]. Each Party will notify the other Party thirty (30) days in advance of cancelation of any such insurance [***].

14.7. **Disclaimer.** The Parties each acknowledge and agree, that (a) research, Development, and Commercialization is inherently uncertain, (b) no outcome or success of any Collaboration Compound, Collaboration **Product**, or Companion Diagnostic directed to any Collaboration Target is or can be assured, and (c) failure to achieve Development, Manufacturing, or Commercialization of Collaboration Compound, Collaboration Product, or Companion Diagnostic directed to any Collaboration Target will not in and of itself constitute a breach or default of any obligation in this Agreement.

15. INTELLECTUAL PROPERTY

15.1. Inventorship.

15.1.1. **Determinations of Inventorship**. Inventorship for inventions and discoveries (including Know-How) first made during the course of the performance of activities pursuant to this Agreement will be determined in accordance with United States patent Laws for determining inventorship.

15.1.2. **JRA Exception**. Notwithstanding anything to the contrary in this Agreement, each Party will have the right to invoke the America Invents Act Joint Research Agreement exception codified at 35 U.S.C. § 102(c) (the "**JRA Exception**") when exercising its rights under this Agreement, but only with prior written consent of the other Party in its sole discretion. In the event that a Party intends to invoke the JRA Exception, once agreed to by the other Party if required by the preceding sentence, it will notify the other Party and the other Party will cooperate and coordinate its activities with such Party with respect to any filings or other activities in support thereof. The Parties acknowledge and agree that this Agreement is a "joint research agreement" as defined 35 U.S.C. § 100(h).

15.2. Ownership.

15.2.1. **Ownership of Collaboration Technology**. Subject to Section 15.2.3 (Ownership of Improvements), ownership of all Know-How, Materials (including Regulatory Materials and clinical data), and all Patents and other intellectual property rights arising therefrom, created or conceived by or on behalf of a Party (whether solely, jointly with the other Party, or jointly with a Third Party) in the performance of any activities under this Agreement will be determined by inventorship. Accordingly, Wave will and does own all rights, title, and interests in and to all Wave Collaboration IP, Takeda will and does own all rights, title, and interests in and to all Takeda Collaboration IP, and the Parties will jointly own all rights, title, and interest in and to all Joint Collaboration IP.

15.2.2. **Joint Collaboration IP**. Each Party will have an undivided one-half interest in and to the Joint Collaboration IP. Each Party will exercise its ownership rights in and to such Joint Collaboration IP, including the right to license and sublicense or otherwise to exploit, transfer, or encumber its ownership interest, without an accounting or obligation to, or consent required from, the other Party, but subject to the licenses hereunder and the other terms and conditions of this Agreement. At the reasonable written request of a Party, the other Party will in writing grant such consents and confirm that no such accounting is required to effect the foregoing regarding Joint Collaboration IP.

15.2.3. **Ownership of Improvements**. Notwithstanding anything else in this Agreement, (a) Wave will and does own all rights, title, and interests in and to all Wave Improvements and (b) Takeda will and does own all rights, title, and interests in and to all Takeda Improvements. If Wave holds any rights, title, or interests in any Takeda Improvement, then Wave hereby does and agrees to assign any and all right, title in interest to any Takeda Improvement to Takeda together with the right to file or own applications for any Patent and any Patent issuing thereon. If Takeda holds any rights, title, or interests in any Wave Improvement, then Takeda hereby does and agrees to assign any and all right, title in interest to any Wave Improvement to Wave together with the right to file or own applications for any Patent and any Patent issuing thereon.

15.2.4. **Covenants in Support of Assignment**. Upon an assignee Party's request, the assigning Party will provide all further cooperation that the assignee Party reasonably determines is necessary to give effect to the ownership (including with respect to rights of priority) of applicable Improvements set forth in Section 15.2.3 (Ownership of Improvements) and to ensure the assignee Party the full and quiet enjoyment of the applicable Improvements, including executing and delivering further assignments, consents, releases, and other commercially reasonable documentation, and providing good faith testimony by affidavit, declaration, deposition, in person or other proper means and otherwise assisting the assignee Party in support of any effort by the assignee Party to establish, perfect, defend, or enforce its rights in the applicable Improvements. Upon the assignee Party's request, the assigning Party will obtain the cooperation of the individual inventors of any inventions disclosed in the applicable Improvements, including (a) obtaining signatures of such inventors on any patent applications or other documentation reasonably necessary to obtain patent protection for such inventions, and (b) procuring (at the assignee Party's cost and expense) such inventors' good faith testimony by affidavit, declaration, deposition in person, or other proper means in support of the assignee Party's efforts in establishing, perfecting, defending, or enforcing Patents included in the applicable Improvements.

15.3. **Disclosure of Inventions.** The Parties will promptly disclose to each other any Joint Collaboration IP and **Improvements** developed or conceived during the Term, but no later than thirty (30) days after the applicable Party's intellectual property department receives notice of such development or conception.

15.4. **Prosecution and Maintenance of Patents.**

15.4.1. **Takeda Technology**.

15.4.1.1. **General**. Subject to the remainder of this Section 15.4.1 (Takeda Technology), as between the Parties, Takeda will have the sole responsibility to Prosecute and Maintain all (a) Takeda Patents, and (b) Patents within the Takeda Improvements and Takeda Collaboration IP (collectively, "**Takeda Prosecuted Patents**") in Takeda's name at Takeda's sole discretion and will have sole responsibility for all applicable Patent Costs with respect thereto. Takeda will consult with Wave on its strategy for the Prosecution and Maintenance of all such Takeda Prosecuted Patents. Takeda will consult with Wave on its strategy for the Prosecution and Maintenance of all such Takeda Patents. Takeda will furnish Wave, via electronic mail or such other method as mutually agreed by the Parties,

copies of proposed filings and documents received from outside counsel in the course of Prosecuting and Maintaining such Patents, or copies of documents filed with the relevant Patent Offices with respect to such Patents and such other documents related to the Prosecution and Maintenance of such Patents, and as applicable in sufficient time prior to filing such document or making any payment due thereunder to allow for review and comment by Wave. Takeda will consider in good faith timely comments from Wave thereon. Takeda will furnish Wave, via electronic mail or such other method as mutually agreed by the Parties, copies of documents filed with the relevant Patent Offices with respect to such Patents.

15.4.1.2. **Abandonment by Takeda**. In the event that Takeda elects not to Prosecute and Maintain (or continue to Prosecute and Maintain, including filing a Patent claiming priority to a Patent prior to its issuance), any Takeda Prosecuted Patent in the Territory that Covers the Exploitation of any Collaboration Product, Takeda will notify Wave at least ninety (90) days before any such Patent would become abandoned, no longer available, or otherwise forfeited, whereupon at the written request of Wave the Parties will meet to discuss any such decision by Takeda. Subject to Takeda's consent, not to be unreasonably withheld, and subject to the provisions of any applicable Takeda In-License, Wave will have the right (but not the obligation) to Prosecute and Maintain in the Territory such Patent in the name of Takeda (which right will include the right to file additional Patents claiming priority to such Patent) at Wave's sole discretion and will have sole responsibility for all applicable Patent Costs with respect thereto. Wave will furnish Takeda, via electronic mail or such other method as mutually agreed by the Parties, copies of documents filed with the relevant Patent Offices with respect to such Patents.

15.4.2. **Wave Technology**.

15.4.2.1. **General**. Subject to the remainder of this Section 15.4.2 (Wave Technology), as between the Parties, Wave will have the sole responsibility to Prosecute and Maintain all (a) Wave Patents, and (b) Patents within the Wave Improvements and Wave Collaboration IP (collectively, "**Wave Prosecuted Patents**") in Wave's name at Wave's sole discretion and will have sole responsibility for all applicable Patents Costs with respect thereto. Wave will consult with Takeda on its strategy for the Prosecution and Maintenance of all such Wave Prosecuted Patents. Wave will furnish Takeda, via electronic mail or such other method as mutually agreed by the Parties, copies of proposed filings and documents received from outside counsel in the course of Prosecuting and Maintaining such Patents, or copies of documents filed with the relevant Patent Offices with respect to such Patents, and such other documents related to the Prosecution and Maintenance of such Patents and, as applicable, in sufficient time prior to filing such document or making any payment due thereunder to allow for review and comment by Takeda. Wave will consider in good faith timely comments from Takeda thereon. Wave will furnish Takeda, via electronic mail or such other method as mutually agreed by the Parties, copies of documents filed with the relevant national Patent Offices with respect to such Patents.

15.4.2.2. **Abandonment by Wave**. In the event that Wave elects not to Prosecute and Maintain (or continue to Prosecute and Maintain, including filing a Patent claiming priority to a Patent prior to its issuance), any Wave Prosecuted Patent in the Territory that Covers the Exploitation of any Collaboration Product, Wave will notify Takeda at least ninety (90) days before any such Patent would become abandoned, no longer available or otherwise forfeited, whereupon at the written request of Takeda the Parties will meet to discuss any such decision by Wave. Subject to Wave's consent, not to be unreasonably withheld, and subject to the provisions of any applicable Wave In-License, Takeda will have the right (but not the obligation) to Prosecute and Maintain in the Territory such Patent in the name of Wave (which right will include the right to file additional Patents claiming priority to such Patent) at Takeda's sole discretion and will have sole responsibility for all applicable Patent Costs with respect thereto. Takeda will furnish Wave, via electronic mail or such other method as mutually agreed by the Parties, copies of documents filed with the relevant national Patent Offices with respect to such Patents.

15.4.3. **Joint Collaboration IP**.

15.4.3.1. **Takeda First Right.** Subject to the remainder of this Section 15.4.3.1 (Takeda First Right), as between the Parties, Takeda will have the right (but not the obligation), at Takeda's sole discretion, to Prosecute and Maintain all Patents within the Joint Collaboration IP ("**Joint Collaboration Patents**") anywhere in the world, in the names of both Wave and Takeda. Takeda will consult with Wave on the strategy for the Prosecution and Maintenance of all such Joint Collaboration Patents. Takeda will furnish Wave, via electronic mail or such other method as mutually agreed by the Parties, copies of proposed filings and documents received from outside counsel in the course of Prosecuting and Maintaining such Patents, or copies of documents filed with the relevant Patent Offices with respect to such Patents and such other documents related to the Prosecution and Maintenance of such Patents and, as applicable, in sufficient time prior to filing such document or making any payment due thereunder to allow for review and comment by Wave. Takeda will consider in good faith any timely comments from Wave thereon. Takeda will furnish Wave, via electronic mail or such other method as mutually agreed by the Parties, copies of documents filed with the relevant Patent Offices with respect to such Patents. The Parties will apportion the applicable Patent Costs when Takeda is leading the Prosecution and Maintenance thereof (with appropriate reimbursement mechanisms agreed-to as needed) in accordance with the following terms: fifty percent (50%) to Wave and fifty percent (50%) to Takeda.

15.4.3.2. **Wave Step-In Right**. In the event that Takeda elects not to Prosecute and Maintain (or continue to Prosecute and Maintain, including filing a Patent claiming priority to a Patent prior to its issuance) any Joint Collaboration Patent anywhere in the world, then Takeda will notify Wave at least ninety (90) days before any such Patent would become abandoned, no longer available, or otherwise forfeited, whereupon at the written request of Wave,

the Parties will meet to discuss any such decision by Takeda. Wave will have the right (but not the obligation) to Prosecute and Maintain worldwide such Patent (which right will include the right to file additional Patents claiming priority to such Patent) at Wave's sole discretion and will have sole responsibility for all applicable Patent Costs with respect thereto. Wave will furnish Takeda, via electronic mail or such other method as mutually agreed by the Parties, copies of documents filed with the relevant Patent Offices with respect to such Patents.

15.4.4. **Patent Assistance**. Each Party hereby agrees: (a) to use Commercially Reasonable Efforts to make its employees, attorneys, agents, and consultants reasonably available to the other Party (or to the other Party's authorized attorneys, agents or representatives), to the extent reasonably necessary to enable such Party to undertake any Prosecution and Maintenance activities described in this Section 15.4.4 (Patent Assistance); (b) to sign, or to use Commercially Reasonable Efforts to have signed, all legal documents as are reasonably necessary to allow the other Party to undertake any Prosecution and Maintenance described herein; and (c) to reasonably cooperate in any such Prosecution and Maintenance activities by the other Party.

15.5. Third Party Infringement and Defense.

15.5.1. **Notices**. Each Party will promptly report in writing to the other Party any Competitive Infringement of which such Party (or any of its Affiliates or Sublicensees) becomes aware, and will provide the other Party with all available evidence of such Competitive Infringement in such Party's control. Subject to the terms of this Section 15.5 (Third Party Infringement and Defense), the JSC will discuss in good faith strategies for abating such Competitive Infringement of any Collaboration Product within the Territory (which may include not taking any such steps).

15.5.2. **Rights to Enforce**.

15.5.2.1. **Takeda First Right**. As between the Parties, Takeda will have the first right (but not the obligation), at Takeda's sole discretion through counsel of its choosing that is reasonably acceptable to Wave, to seek to abate any Competitive Infringement by enforcing any Wave Patents, Takeda Patents, or Joint Collaboration Patents. If Takeda does not take steps to abate such Competitive Infringement, within six (6) months after receipt of written notice of such Competitive Infringement (or such shorter period of time as is required to comply with the provisions of Section 15.5.2.2 (Hatch-Waxman) or the time periods set forth under any other applicable Law in the United States or any other country in the Territory to not waive any statutory rights), then Takeda will provide Wave with notice of such decision and in any event, Wave will have the rights set forth in Section 15.5.4.1 (Second Right). Takeda will pay all Patent Costs incurred by Takeda for such enforcement.

15.5.2.2. **Hatch-Waxman**. Notwithstanding anything herein to the contrary, should a Party receive a certification for a Licensed Product pursuant to the Drug Price Competition and Patent Term Restoration Act of 1984 (Public Law 98-417, known as the Hatch-Waxman Act), as amended, or its equivalent in a country other than the US, with respect to any activities under this Agreement in the Field, then such Party will immediately provide the other Party with a copy of such certification. For each Licensed Product, Takeda will have thirty (30) days from date on which it receives or provides a copy of such certification to provide written notice to the other Party ("**H-W Suit Notice**") whether such first Party will bring suit, at its expense, within a forty-five (45) day period from the date of such certification. Should such thirty (30) day period expire without such first Party bringing suit or providing such H-W Suit Notice, then such other Party will be free to immediately bring suit in its name.

15.5.3. **Defense**. As between the Parties, the Party controlling the Prosecution and Maintenance of any Patent under Section 15.4 (Prosecution and Maintenance of Patents) (*i.e.*, initially, Takeda for the Takeda Patents and Joint Collaboration Patents and Wave for Wave Patents), will have the right (but not the obligation), at its sole discretion, to defend against a declaratory judgment action, *inter partes* review, opposition proceeding, interference, or other action challenging any such Patent, other than with respect to (a) any counter-claims or defenses in any enforcement action brought by the other Party pursuant to Section 15.5.2 (Rights to Enforce) or (b) any action by a Third Party in response to an enforcement action brought by the other Party, which in both cases ((a) and (b)), will be controlled by such other Party. If the Party controlling such Prosecution and Maintenance of Patents under Section 15.4 (Prosecution and Maintenance of Patents) does not defend such Patent under this Section 15.5.3 (Defense) within sixty (60) days (or such shorter period of time as is required to comply with the provisions of Section 15.5.2.2 (Hatch-Waxman) or the time periods set forth under any other applicable Law in the United States or any other country in the Territory to not waive any statutory rights), or elects not to continue any such defense (in which case it will promptly provide notice thereof to the other Party), then the other Party will have the right (but not the obligation), at its sole discretion, to defend any such Patent.

15.5.4. **Withdrawal, Cooperation, and Participation**. With respect to any infringement or defensive action identified above in this Section 15.5 (Third Party Infringement and Defense) and subject to the terms of this Section 15 (Intellectual Property):

15.5.4.1. **Second Right**. If the controlling Party ceases to pursue or withdraws from such action, then it will promptly notify the other Party (in sufficient time to enable the other Party to meet any deadlines by which any action must be taken to preserve any rights in such infringement or defensive action (including any such period of time as is required to comply with the provisions of Section 15.5.2.2 (Hatch-Waxman))), then such other Party may substitute itself for the withdrawing Party and proceed under the terms and conditions of this Section 15.5 (Third Party Infringement and Defense).

15.5.4.2. **Cooperation**. The non-controlling Party will cooperate with the Party controlling any such action (as may be reasonably requested by the controlling Party), including, at the controlling Party's sole cost and expense, (a) providing access to relevant documents and other evidence, (b) using reasonable efforts to make its and its Affiliates and licensees and Sublicensees and all of their respective employees, subcontractors, consultants, and agents available during reasonable business hours and for reasonable periods of time, but only to the extent relevant to such action, and (c) if reasonably necessary, by being joined as a party, subject for this clause (c) to the controlling Party agreeing to pay those Patent Costs incurred by such non-controlling Party in connection with such joinder. The Party controlling any such action will keep the other Party reasonably updated with respect to any such action, including providing copies of all materials documents received or filed in connection with any such action.

15.5.4.3. **Consultation**. Each Party will have the right to consult with the other Party regarding any such action controlled by such other Party, in each case at such first Party's sole cost and expense. If a Party elects to so be involved, then the controlling Party will provide the other Party and its counsel with an opportunity to consult with the controlling Party and its counsel regarding the prosecution of such action (including reviewing the contents of any correspondence, legal papers or other documents related thereto), and the controlling Party will take into account reasonable and timely requests of the other Party regarding such enforcement or defense. Nothing in this Section 15.5.4.3 (Consultation) will limit the controlling Party's ability to prosecute any such action.

15.5.5. **Settlement**. With respect to any infringement or defensive action identified above in this Section 15.5 (Third Party Infringement and Defense), the Party controlling such action will have the right to settle or otherwise dispose of such action on such terms as such Party will determine in its sole discretion, including by granting a license or sublicense to a Third Party under the rights granted to such Party in Section 10 (Licenses) in accordance with the sublicensing terms therein, as applicable. Notwithstanding the foregoing, no such settlement or other disposition will (a) impose any monetary restriction or obligation on or admit fault of the other Party or (b) adversely affect the other Party's rights under this Agreement to any such Patent then being enforced or defended, in each case ((a) and (b)) without the prior written consent of the other Party, not to be unreasonably withheld.

15.5.6. **Damages**. Unless otherwise agreed by the Parties, all monies recovered upon the final judgment or settlement of any action described in this Section 15.5 (Third Party Infringement and Defense) will be used first to reimburse the controlling Party for its Patent Costs arising from the action, with the balance of any such recovery to be allocated as follows:

15.5.6.1. **Category 1 Targets**. For any action related to a Licensed Category 1 Product, all recoveries will be [***] to Takeda;

15.5.6.2. **Category 2 Targets**. For any action related to a Licensed Category 2 Product, (a) if Wave was the controlling Party, [***] to Wave and [***] to Takeda, and (b) if Takeda was the controlling Party, [***] to Takeda and [***] to Wave.

15.6. **Patent Extensions.** Takeda will have the right to elect and file for patent term restoration or extension, supplemental protection certificate, or any of their equivalents with respect to such Patents Covering any Collaboration Product in the Territory. The Parties will cooperate and Takeda will take Wave's reasonable input into account in determining whether to obtain such patent term restoration, extension, supplemental protection certificate, or equivalent for any other pharmaceutical product. Upon the request by a Takeda, Wave will reasonably cooperate in the implementation of Takeda's decisions made in a manner with this Section 15.6 (Patent Extensions).

15.7. **Patent Listings.** With respect to any filings made to Regulatory Authorities with respect to any Wave Patent, Takeda Patent, or Joint Collaboration Patent Covering any Collaboration Product, including as required or allowed **with** in the United States, the FDA's Orange Book if applicable, or outside the United States, other international equivalents, but subject to Section 15.5.2.2 (Hatch-Waxman), (a) the Parties will list any such Patents as may be required by applicable Laws, and (b) each Party will have the sole right to make any such decision whether to list for Takeda Patents or Joint Collaboration Patents for Takeda or the Wave Patents for Wave, in each case, with respect to any Collaboration Product. Notwithstanding the foregoing clauses (a) and (b), each Party will use Commercially Reasonable Efforts to make any such listing if available for the Patents, subject to the enforcement rights specified in Section 15.5.2 (Rights to Enforce) with respect to any Collaboration Product; *provided, however*, that no Party will be required to use any such Commercially Reasonable Efforts in a manner inconsistent with any of those clauses if any such item could impair the applicable Patent (including its enforcement potential) or the ability to list such Patent for any other pharmaceutical product. Upon the request by a Party, such other Party will reasonably cooperate in the implementation of such requesting Party's decisions made in a manner with this Section 15.7 (Patent Listings).

15.8. **Third Party Rights.** Notwithstanding anything in this Section 15 (Intellectual Property) to the contrary, each Party's rights and obligations with respect to any Patent Controlled pursuant to an In-License under this Section 15 (Intellectual Property) will be subject to the Third Party rights and obligations under any such applicable In-License.

15.9. **Common Interest.** All information exchanged between the Parties regarding the Prosecution and Maintenance, and enforcement and defense, of the Patents under this Section 15 (Intellectual Property) will be deemed **Confidential** Information of the disclosing Party. In addition, the Parties acknowledge and agree that, with regard to such Prosecution and Maintenance, and enforcement and defense of the Patents under this Section 15 (Intellectual Property), the interests of the Parties as collaborators and licensor and licensee are to obtain the strongest patent protection possible, and as such, are aligned and are legal in nature. The Parties agree and acknowledge that they have not waived, and nothing in this Agreement constitutes a waiver of, any legal privilege concerning the Patents under this Section 15 (Intellectual Property), including privilege under the common interest doctrine and similar or related doctrines. Notwithstanding anything to the contrary contained herein, to the extent a Party has a good faith believe that any information required to be disclosed by such Party to the other Party under this Section 15 (Intellectual Property) is protected by attorney-client privilege or any other applicable legal privilege or immunity, such Party will not be required to disclose such information and the Parties

will in good faith cooperate to agree upon a procedure (including entering into a specific common interest agreement, disclosing such information on a "for counsel eyes only" basis or similar procedure) under which such information may be disclosed without waiving or breaching such privilege or immunity.

16. TERM AND TERMINATION

16.1. **Term.** This Agreement will be effective as of the Effective Date and, unless terminated earlier, will continue on a Collaboration Target-by-Collaboration Target basis and Collaboration Product-by-**Collaboration** Product basis until the date on which, (a) with respect to a Candidate Category 1 Target, (i) expiration or termination of the Category 1 Development Program with respect to such Candidate Category 1 Target, if Takeda does not exercise an Option with respect to such Candidate Category 1 Target in accordance with this Agreement, or (b) the Licensed Target Date for such Candidate Category 1 Target, if Takeda exercises an Option with respect to such Candidate Category 1 Target, (b) with respect to a Licensed Category 1 Target, the date on which neither Party is Exploiting any Licensed Compounds, Licensed Products, or Companion Diagnostics directed to such Licensed Category 1 Target, and (b) with respect to a Licensed Category 2 Target, the Royalty Term has expired for Licensed Category 2 Products directed to the applicable Licensed Category 2 Target in each country in the Territory (the "**Term**"). Upon expiration of the Royalty Term for a Licensed Category 2 Product in a country, the licenses granted from each Party to the other Party in Section 10 (Licenses) with respect to such Licensed Product in such country will become fully-paid, irrevocable, and perpetual.

16.2. **Termination for Convenience.** Takeda may terminate this Agreement for any reason or no reason at any time upon one hundred **and** eighty days' prior written notice in its entirety or on a Collaboration Target-by-Collaboration Target basis.

16.3. **Termination for Patent Challenge.** Either Party has the right to terminate this Agreement on a Collaboration Target-by-Collaboration **Target** basis upon written notice to the other Party if a Party or any of its Related Parties directly or indirectly challenges in a legal or administrative proceeding the patentability, enforceability or validity of any Patents within the Wave Technology (with respect to a challenge brought by Takeda or any of its Related Parties), any Patents within the Takeda Technology (with respect to a challenge brought by Wave or any of its Related Parties), or any Patents within the Joint Collaboration Patents (with respect to a challenge brought by either Party or such Party's related Parties), as the case may be (each, a "**Patent Challenge**"), that Cover any Collaboration Compound, Collaboration Product, or Companion Diagnostic directed to a Collaboration Target, then the other Party may terminate this Agreement with respect to such Collaboration Target to which the Patent Challenge related, upon written notice to the challenging Party; *provided that* (a) this Section 16.3 (Termination for Patent Challenge) will not apply to any such Patent Challenge that is first made by a Party or one of its Related Parties in defense of a claim of patent infringement brought by the other Party under the applicable Patent, (b) with respect to any Third Party that becomes an Affiliate of a Party during the Term as a result of a Change of Control of such Party or acquisition by such Party, this Section 16.3 (Termination for Patent Challenge) will not apply to any Patent Challenge involving such Third Party (i) if such Patent Challenge was initiated at least three (3) months before the signing of the definitive document(s) whereby such Third Party becomes such an Affiliate, or (ii) if such Patent Challenge was initiated within any such three (3) month period, if such Party causes such Patent Challenge to be terminated or dismissed (or in the case of ex-parte proceedings, multi-party proceedings, or other Patent Challenges to be withdrawn, causes such Third Party to withdraw as a party from such Patent Challenge and to cease actively assisting any

other party to such Patent Challenge), and (c) with respect to any non-Affiliate Sublicensee, a Party will not have the right to terminate this Agreement under this Section 16.3 (Termination for Patent Challenge) with respect to any Collaboration Target if the other Party (i) causes such Patent Challenge to be terminated or dismissed (or in the case of ex-parte proceedings, multi-party proceedings, or other Patent Challenges in which the challenging party does not have the power to unilaterally cause the Patent Challenge to be withdrawn, causes such Sublicensee to withdraw as a party from such Patent Challenge and to cease actively assisting any other party to such Patent Challenge) or (ii) terminates such Sublicensee's sublicense to the Patents being challenged by the Sublicensee, in each case, within ninety (90) days of the terminating Party's notice to the other Party under this Section 16.3 (Termination for Patent Challenge).

16.4. Termination for Cause.

16.4.1. Right to Terminate for Material Breach.

16.4.1.1. Termination by Wave. Subject to Section 16.4.2 (Disputed Breach), Wave will have the right to terminate this Agreement upon delivery of written notice to Takeda in the event of any material breach of this Agreement by Takeda with respect to a Collaboration Target or in its entirety in the event of any material breach of this Agreement by Takeda that relates to all Collaboration Targets, *provided that* such termination will not be effective if such breach has been cured within ninety (90) days after written notice thereof is given by Wave to Takeda specifying the nature of the alleged breach (or, if such default cannot be cured within such first ninety (90) day period, such termination will not be effective if such breach has been cured within one hundred eighty (180) days after such notice if Takeda commences actions to cure such default within such ninety (90) day period and thereafter diligently continues such actions); *provided, however,* that to the extent such material breach involves the failure to make a payment when due, such breach must be cured within thirty (30) days after written notice thereof is given by Wave to Takeda.

16.4.1.2. Termination by Takeda. Subject to Section 16.4.2 (Disputed Breach), Takeda will have the right to terminate this Agreement upon delivery of written notice to Wave on a Collaboration Target-by-Collaboration Target basis in the event of any material breach of this Agreement by Wave with respect to such Collaboration Target or in its entirety in the event of any material breach of this Agreement that relates to all Licensed Targets, *provided that* such termination will not be effective if such breach has been cured within ninety (90) days after written notice thereof is given by Takeda to Wave specifying the nature of the alleged breach (or, if such default cannot be cured within such first ninety (90) day period, such termination will not be effective if such breach has been cured within one hundred and eighty (180) days after such notice if Wave commences actions to cure such default within such ninety (90) day period and thereafter diligently continues such actions); *provided, however*, that to the extent such material breach involves the failure to make a payment when due, such breach must be cured within thirty (30) days after written notice thereof is given by Takeda to Wave.

16.4.2. **Disputed Breach**. If the alleged breaching Party disputes in good faith the existence or materiality of a breach specified in a notice provided by the other Party in accordance with Section 16.4.1 (Right to Terminate for Material Breach) and such alleged breaching Party provides the other Party notice of such Dispute within such ninety (90) day or thirty (30) day period, then the cure periods set forth in Section 16.4 (Termination for Cause) will be tolled during the pendency of the dispute resolution process as set forth in Section 17.3 (Dispute Resolution) and the non-breaching Party will not have the right to terminate this Agreement under Section 16.4.1 (Right to Terminate for Material Breach) unless and until such dispute resolution process has been completed (including the tolling and cure periods set forth therein).

16.4.3. **Cessation of Development**. On a Licensed Target-by-Licensed Target basis, Wave may, at its election, terminate this Agreement with respect to such Licensed Target upon thirty (30) days' prior written notice to Takeda in the event that Takeda and its Affiliates do not conduct any Development or Commercialization activities with respect to Licensed Compounds, Licensed Products, or Companion Diagnostics directed to such Licensed Target for a continuous period [***].

16.5. **Termination for Insolvency.** If, at any time during the Term (a) a case is commenced by or against either Party under Title 11, United States Code, as amended, or analogous provisions of applicable Law outside the United States (the "**Bankruptcy Code**") and, in the event of an involuntary case under the Bankruptcy Code, such case is not dismissed within sixty (60) days after the commencement thereof, (b) either Party files for or is subject to the institution of bankruptcy, liquidation or receivership proceedings (other than a case under the Bankruptcy Code), (c) either Party assigns all or a substantial portion of its assets for the benefit of creditors, (d) a receiver or custodian is appointed for either Party's business, or (e) a substantial portion of either Party's business is subject to attachment or similar process; then, in any such case ((a), (b), (c), (d) or (e)), the other Party may terminate this Agreement upon written notice to the extent permitted under applicable Law.

16.6. **Effects of Termination by Wave for Cause or Takeda for Convenience.** Upon termination of this Agreement with respect to any Collaboration Target, or in its entirety (a) by Takeda pursuant to Section 16.2 (Termination for Convenience), or (b) by Wave pursuant to Section 16.3 (Termination for Patent Challenge) in the event of a Patent Challenge by Takeda, Section 16.4.3 (Cessation of Development or Commercialization), Section 16.4.1.1 (Termination by Wave) in the event of an uncured material breach by Takeda, Section 16.5 (Termination for Insolvency) in the event of Takeda's insolvency:

16.6.1. **Termination of Options**. If this Agreement is terminated in its entirety, then all Options granted under this Agreement will terminate. If this Agreement is terminated with respect to any Candidate Category 1 Target, then the Option for such Candidate Category 1 Target will terminate.

16.6.2. **Termination of Licenses**. If this Agreement is terminated in its entirety, then all licenses granted under Section 10 (Licenses) under this Agreement will terminate. If this Agreement is terminated with respect to a Collaboration Target, then all such licenses will terminate only with respect to such Collaboration Target.

16.6.3. **Reversion License**. At Wave's request delivered no later than sixty (60) days after the effective date of termination, effective upon such effective date of termination of this Agreement or of a Collaboration Target, as applicable, Takeda hereby grants (without any further action required on the part of Wave) to Wave and its Affiliates, a royalty-free, fully paid, worldwide, irrevocable, perpetual license, with the right to grant sublicenses through multiple tiers, [***], solely to the extent necessary to Exploit Reversion Products in the Field in the Territory (the "**Reversion License**"). At Wave's election in the written request referenced above, on a Collaboration Target-by-Collaboration Target basis, the foregoing license will be either [***]. Payments would be made by Wave to Takeda in a manner analogous to that set forth in Section 11.4.4 (Category 2 Royalties), including the adjustments set forth therein (*mutatis mutandis*). [***], then at Wave's request, at Wave's written request, the Parties will enter into commercially reasonable prosecution, enforcement and defense terms [***] with respect to the Reversion Products, and Wave will bear the costs of such prosecution, enforcement and defense activities to the extent related to such Reversion Products. If any Reversion Product is a Combination Product, then the Reversion License will not extend to any other active ingredient or component in such Combination Product. If Wave requests the Reversion License [***] is in-licensed by Takeda or any of its Related Parties, [***].

16.6.4. **Regulatory Approvals and Regulatory Materials.** Takeda will as promptly as practicable (a) assign to Wave or Wave's designee possession and ownership of all Regulatory Approvals, Regulatory Materials, and Pricing Approvals relating exclusively to the Exploitation of the Reversion Products in the Territory, (b) transfer to Wave or Wave's designee copies of all material correspondence and conversation logs with Regulatory Authorities in Takeda's possession or Control related to the Reversion Products in the Territory and all data, reports, records, and materials, and other sales and marketing related information in Takeda's possession or Control to the extent that such data, reports, records, materials, or other information relate to the Exploitation of the Reversion Products in the Territory, including all non-clinical and clinical data relating to the Reversion Products and customer lists and customer contact information and all adverse event data related to the Reversion Products, in each case, in the Territory and in Takeda's possession or Control. In addition, at Wave's request, Takeda will appoint Wave as Takeda's or Takeda's Related Parties' agent for all Reversion Product-related matters in the Territory involving Regulatory Authorities until all Regulatory Approvals, Regulatory Materials, and Pricing Approvals in the Territory have been assigned to Wave or its designee. In the event of failure to obtain assignment, upon the effective date of such termination, Takeda hereby consents and grants to Wave the right to access and reference (without any further action required on the part of Takeda, whose authorization to file this consent with any Regulatory Authority is hereby granted) any Regulatory Approvals, Regulatory Materials, and Pricing Approvals with respect to all Reversion Products in the Territory.

16.6.5. **Appointment as Distributor**. If the effective date of termination is after the First Commercial Sale of a Reversion Product, then at Wave's request, to the extent permitted by applicable Laws, Takeda or its Related Parties will appoint Wave as its exclusive distributor of such Reversion Product in the Territory and grant Wave the right to appoint sub-distributors, until such time as all Regulatory Approvals in the Territory have been transferred to Wave or its designee.

16.6.6. **Continuation of Supply**. If Takeda or its Related Parties are Manufacturing finished product with respect to Reversion Products on the effective date of termination of this Agreement, then at Wave's request, Takeda or its Related Parties will negotiate in good faith to enter into a commercially reasonable supply agreement pursuant to which Takeda or such Related Party would supply such finished product to Wave at a price equal to [***], until the earlier of (a) such time as all Regulatory Approvals related to the Reversion Products have been assigned to Wave or its designee, Wave has obtained all necessary manufacturing approvals, and Wave has procured or developed its own source of such finished product supply, or (b) [***] months following the effective date of termination of this Agreement in its entirety or with respect to the applicable Terminated Target (as applicable).

16.6.7. **Third Party Agreements**. If Wave so requests, and to the extent permitted under Takeda's obligations to Third Parties on the effective date of termination of this Agreement in its entirety or with respect to the applicable Terminated Target (as applicable), Takeda will transfer to Wave any Third Party agreements relating exclusively to the Exploitation of the applicable Reversion Products (but not any other active ingredients or components if any Reversion Product is a Combination Product) to which Takeda is a party (including any Takeda In-License), subject to any required consents of such Third Party, which Takeda will use Commercially Reasonable Efforts to obtain promptly.

16.6.8. **Takeda Trademarks**. Takeda will promptly transfer and assign to Wave all of Takeda's and its Affiliates' rights, title, and interests in and to any Trademarks exclusively used in connection with the Reversion Products (but not any Takeda house marks or any Trademark containing the word "Takeda") owned by Takeda and used for the Reversion Products in the Field in the Territory.

16.6.9. **Inventory Transfer**. Takeda will transfer to Wave any inventory of the Reversion Products in the possession or control of Takeda or its Affiliates as of the termination date at the actual price paid by Takeda [***].

16.6.10. **Return of Confidential Information**. Except in the case of Wave for any Confidential Information of Takeda that is the subject of a Reversion License, each Party will promptly destroy or return to the other Party all of such other Party's Confidential Information that relates to a Terminated Target and that was provided by or on behalf of such other Party hereunder that is in the possession or control of such Party (or any of its Affiliates), except that such Party will have the right to copies of intangible Confidential Information of such other Party for legal and archival purposes.

16.6.11. **Dissolution of the JSC and Subcommittees**. If this Agreement is terminated in its entirety, then the JSC and all Subcommittees will be dissolved as of the effective date of such termination, *provided that*, for any surviving provisions requiring action or decision by the JSC or any of the Subcommittees or an Executive Officer, each Party will appoint representatives to act as its JSC and Subcommittee members or Executive Officer, as applicable.

16.6.12. **Termination of Rights and Obligations**. Except as set forth in this Section 16.6 (Effects of Termination by Wave for Cause or Takeda for Convenience) and Section 16.9 (Survival), as of the effective date of such termination all rights and obligations of the Parties (a) under this Agreement will terminate if this Agreement is terminated in its entirety, and (b) with respect to applicable Terminated Target and the Reversion Products that are directed to such Terminated Target, if this Agreement is terminated with respect to a Licensed Target.

16.6.13. **Future Assurances**. Takeda will execute all documents and take, or cause to be taken, all such further actions as may be reasonably requested by Wave in order to give effect to the foregoing clauses.

16.7. **Effects of Termination by Takeda for Cause.** Upon termination of this Agreement in its entirety or with respect to a Licensed Target by Takeda pursuant to Section 16.3 (Termination for Patent Challenge) in the event of a Patent Challenge by Wave, Section 16.4.1.2 (Termination by Takeda) in the event of an uncured material breach by Wave, or Section 16.5 (Termination for Insolvency) in the event of Wave's insolvency:

16.7.1. **Termination of License Options**. If this Agreement is terminated in its entirety, then all Options granted under this Agreement will terminate.

16.7.2. **Termination of Licenses**. If this Agreement is terminated in its entirety, then all licenses granted under Section 10 (Licenses) will terminate. If the Agreement is terminated with respect to a Licensed Target, then all such licenses will terminate with respect to such Terminated Target.

16.7.3. **Return of Confidential Information**. Each Party will promptly destroy or return to the other Party all of such other Party's Confidential Information that relates to a Terminated Target and that was provided by or on behalf of such other Party hereunder that is in the possession or control of such Party (or any of its Affiliates), except that such Party will have the right to copies of intangible Confidential Information of such other Party for legal and archival purposes.

16.7.4. **Dissolution of the JSC and Subcommittees**. If this Agreement is terminated in its entirety, then the JSC and all Subcommittees will be dissolved as of the effective date of such termination, *provided that*, for any surviving provisions requiring action or decision by the JSC or any of the Subcommittees or an Executive Officer, each Party will appoint representatives to act as its JSC and Subcommittee members or Executive Officer, as applicable.

16.7.5. **Termination of Rights and Obligations**. Except as set forth in this Section 16.7 (Effects of Termination by Takeda for Cause) and Section 16.9 (Survival), all rights and obligations of the Parties hereunder will terminate as of the effective date of such termination.

16.7.6. **Future Assurances**. Wave will execute all documents and take, or cause to be taken, all such further actions as may be reasonably requested by Takeda in order to give effect to the foregoing clauses.

16.8. **Alternative in Lieu of Termination.** Notwithstanding anything to the contrary set forth in this Agreement, if Takeda has the right to terminate this Agreement in its entirety or with respect to a Collaboration Target pursuant to Section 16.4.1.2 (Termination by Takeda) as a result of an uncured material breach by Wave, then in lieu of exercising such termination right, Takeda may elect by written notice to Wave after the applicable cure period to have this Agreement continue in full force and effect other than the following provisions, which will automatically terminate solely with respect to the applicable Collaboration Target(s) starting immediately after the end of such cure period: Section 6.4 (Communications with Regulatory Authorities), Section 6.5 (Regulatory Meetings), Section 6.6 (Regulatory Submissions), and Section 8.1.5 (Wave Commercialization Activities in the U.S.). In addition, in the event that Takeda's rights under this Section 16.8 (Alternative in Lieu of Termination) apply with respect to a given Category 1 Target, then Section 9 (Governance) will be automatically amended solely with respect to the relevant Category 1 Target solely to the extent necessary to give [***]; provided, for clarity, that (a) [***] with respect to any Collaboration Products directed to such Category 1 Target as of the end of the cure period, Section 9 (Governance) will continue in full force and effect for such Category 1 Target with respect to [***], and (b) [***] with respect to all Collaboration Products for such Category 1 Target as of the end of the cure period, then Section 9 (Governance) will be automatically amended solely with respect to the relevant Category 1 Target to give [***] apply with respect to a given Licensed Category 2 Target, then Section 9 (Governance) will automatically terminate with respect to the relevant Licensed Category 2 Target to give [***]; provided, for clarity, that (x) [***] with respect to any Collaboration Products directed to such Licensed Category 2 Target, Section 9 (Governance) will continue in full force and effect for such Licensed Category 2 Target with respect to all [***] for such Licensed Category 2 Target, and (y) [***] with respect to all Collaboration Products for such Licensed Category 2 Target as of the end of the cure period, then Section 9 (Governance) will automatically terminate with respect to the relevant Licensed Category 2 Target [***].

16.9. **Survival.** In addition to the termination consequences set forth in Sections 16.6 (Effects of Termination by Wave for Cause or Takeda for Convenience) and 16.7 (Effects of Termination by Takeda for Cause) (in each case, together with the Sections referenced therein), the following provisions will survive expiration or termination of this Agreement for any reason: all of Sections 1 (Definitions), 3.4.6 (Termination of Option) (solely with respect to the effects of termination), 5.5 (Scientific Records) to the extent consistent with the applicable Party's record retention policies, 5.7.1 (Effects of Technical Failure) (solely with respect to the effects of termination), 8.6 (Recalls, Market Withdrawals, or Corrective Actions), 10.6 (Bankruptcy) (solely in the case of termination), 10.7 (No Other Rights) (solely in case of termination), 11 (Payments) (solely with respect to amounts accrued prior to termination but not paid and the reporting and information sharing procedures associated therewith) (other than 11.2 Equity Investment), 12 (Confidentiality and Publication), 14 (Indemnification; Limitation of Liability; Insurance), 15.1 (Inventorship), 15.2 (Ownership), 15.4.3 (Joint Collaboration IP), 15.4.4 (Patent Assistance) (solely with respect to Joint Collaboration IP), 15.5 (Third Party Infringement and Defense) (solely with respect to Joint Collaboration IP), 15.9 (Common Interest), 16.1 (Term) (solely in case of expiration), Section 16.9 (Survival), and 17 (Miscellaneous). Expiration or termination of this Agreement for any reason will not relieve the Parties of any liability or obligation which accrued hereunder prior to the effective date of such termination or expiration, nor preclude either Party from pursuing all rights and remedies it may have hereunder or at law or in equity, with respect to any breach of this Agreement. For the avoidance of doubt, termination of this Agreement will not affect any SDEA, which will continue to survive so long as any Collaboration Products thereunder are being Commercialized.

17. MISCELLANEOUS

17.1. **Assignment.** Except as provided in this Section 17.1 (Assignment), this Agreement may not be assigned or otherwise transferred, nor may any right or obligation hereunder be assigned or transferred, by either Party **without** the written consent of the other Party. Notwithstanding the foregoing, either Party may, without the other Party's written consent, assign this Agreement and its rights and obligations hereunder in whole or in part to an Affiliate or to a party that acquires, by or otherwise in connection with, merger, sale of assets, or otherwise, all or substantially all of the business of the assigning Party to which the subject matter of this Agreement relates. The assigning Party will remain responsible for the performance by its assignee of any obligation hereunder so assigned. An assignment to an Affiliate will terminate, and all rights so assigned will revert to the assigning Party, if and when such Affiliate ceases to be an Affiliate of the assigning Party. Any purported assignment in violation of this Section 17.1 (Assignment) will be null, void, and of no legal effect.

17.2. **Governing Law.** This Agreement will be construed and the respective rights of the Parties determined in accordance with the substantive Laws of the State of New York, notwithstanding any provisions of New York **Laws** or any other Laws governing conflicts of laws to the contrary, and the patent Laws of the relevant jurisdiction without reference to any rules of conflicts of laws to the contrary.

17.3. **Dispute Resolution.**

17.3.1. **Disputes**. Except as otherwise expressly set forth in this Agreement, including Section 9.7 (Resolution of Subcommittee Disputes), disputes of any nature arising under, relating to, or in connection with this Agreement ("**Disputes**") will be resolved pursuant to this Section 17.3 (Dispute Resolution).

17.3.2. **Resolution by Executive Officers**. [***].

17.3.3. **Litigation**. Any unresolved Dispute that was subject to Section 17.3.2 (Resolution by Executive Officers) must be brought exclusively in a court of competent jurisdiction, federal or state, located in New York, New York, and in no other jurisdiction. Each Party hereby consents to personal jurisdiction and venue in, and agrees to service of process issued or authorized by, such court.

17.3.4. **Jurisdiction**. Each Party to this Agreement, by its execution hereof, (a) hereby irrevocably submits to the exclusive jurisdiction of the United States District Court and state courts located in New York, New York for the purpose of any and all unresolved Disputes which were subject to Section 17.3.2 (Resolution by Execution Officers), (b) hereby waives to the extent not prohibited by applicable Law, and agrees not to assert, by way of motion, as a defense or otherwise, in any such action, any claim that it is not subject personally to the jurisdiction of the above-named courts, that its property is exempt or immune from attachment or execution, that any such action brought in one of the above-named courts in such jurisdiction should be dismissed on grounds of forum *non conveniens*, should be transferred to any court other than one of the above-named courts, or should be stayed by reason of the pendency of some other proceeding in any other court other than one of the above-named courts, or that this Agreement or the subject matter hereof may not be enforced in or by such court, and (c) hereby agrees not to commence any such action other than before one of the

above-named courts nor to make any motion or take any other action seeking or intending to cause the transfer or removal of any such action to any court other than one of the above-named courts whether on the grounds of inconvenient forum or otherwise. Notwithstanding the foregoing, application may be made to any court of competent jurisdiction with respect to the enforcement of any judgment or award.

17.3.5. **Injunctive Relief**. Notwithstanding the foregoing, in the event of an actual or threatened breach hereunder, the aggrieved Party may seek equitable relief (including restraining orders, specific performance or other injunctive relief) in any court or other forum, without first submitting to the dispute resolution procedures set forth in Section 17.3.2 (Resolution by Executive Officers).

17.3.6. **Waiver of Right to Jury Trial**. IN CONNECTION WITH THE PARTIES' RIGHTS UNDER SECTION 17.3.3 (LITIGATION), EACH PARTY, TO THE EXTENT PERMITTED BY APPLICABLE LAWS, KNOWINGLY, VOLUNTARILY, AND INTENTIONALLY WAIVES ITS RIGHT TO A TRIAL BY JURY IN ANY ACTION OR OTHER LEGAL PROCEEDING ARISING OUT OF OR RELATING TO THIS AGREEMENT AND THE TRANSACTIONS IT CONTEMPLATES. THIS WAIVER APPLIES TO ANY ACTION OR LEGAL PROCEEDING, WHETHER SOUNDING IN CONTRACT, TORT, OR OTHERWISE.

17.3.7. **Confidentiality**. Any and all activities conducted under this Section 17.3 (Dispute Resolution), including any and all non-public proceedings and decisions under Section 17.3.3 (Litigation), will be deemed Confidential Information of each of the Parties, and will be subject to the terms of Section 12 (Confidentiality and Publication).

17.3.8. **Expedited Arbitration**. If a Party exercises its rights under this Agreement to refer a Dispute to expedited arbitration (an "**Expedited Dispute**"), then the Parties will follow the expedited dispute resolution process in this Section 17.3.8 (Expedited Arbitration) (and not the dispute resolution process in Section 17.3.2 (Resolution by Executive Officers) of this Agreement) ("**Expedited Arbitration**"). The Parties agree and acknowledge that [***]:

17.3.8.1. [***].

17.3.8.2. [***].

17.3.8.3. [***].

17.3.8.4. [***].

17.3.9. **Tolling**. The Parties agree that all applicable statutes of limitation and time-based defenses (such as estoppel and laches), as well as all time periods in which a Party must exercise rights or perform obligation hereunder, will be tolled once the dispute resolution procedures set forth in this Section 17.3 (Dispute Resolution) have been initiated and for so long as they are pending, and the Parties will cooperate in taking all actions reasonably necessary to achieve such a result. In addition, during the pendency of any Dispute under this Agreement initiated before the end of any applicable cure period, including under Section 16.4 (Termination for Cause), (a) this Agreement will

remain in full force and effect, (b) the provisions of this Agreement relating to termination for material breach with respect to such Dispute will not be effective, (c) the time periods for cure under Section 16.4 (Termination for Cause) as to any termination notice given prior to the initiation of arbitration will be tolled, (d) any time periods to exercise rights or perform obligations will be tolled; and (e) neither Party will issue a notice of termination pursuant to this Agreement based on the subject matter of the arbitration, in each case ((a) – (e)), until the arbitral tribunal has confirmed the material breach and the existence of the facts claimed by a Party to be the basis for the asserted material breach; *provided that* if such breach can be cured by (i) the payment of money, then the defaulting Party will have an additional ten (10) days after its receipt of the arbitral tribunal's decision to pay such amount, or (ii) the taking of specific remedial actions, the defaulting Party will have a reasonably necessary period to diligently undertake and complete such remedial actions within such reasonably necessary period or any specific timeframe established by such arbitral tribunal's decision before any such notice of termination can be issued. Further, with respect to any time periods that have run during the pendency of the Dispute, the applicable Party will have a reasonable period of time or any specific timeframe established by such arbitral tribunal's decision to exercise any rights or perform any obligations affected by the running of such time periods.

17.4. **Entire Agreement; Amendments.** This Agreement, together with the Equity Agreements, Supply Agreements, and SDEA, contains the entire understanding of the Parties with respect to the subject matter hereof, and supersedes all **previous** arrangements with respect to the subject matter hereof, whether written or oral, including, effective as of the Effective Date, that Confidentiality Agreement between Wave Singapore and Takeda dated as of February 6, 2017 (*provided that* all information disclosed or exchanged under such agreement will be treated as Confidential Information hereunder). In the event of any inconsistency between any Development Plan or Commercialization Plan and this Agreement, in each case, the terms of this Agreement will prevail. This Agreement may be amended, or any term hereof modified, only by a written instrument duly-executed by authorized representatives of both Parties. The Exhibits and Schedules attached hereto may be amended, or any term hereof modified, only by a written instrument duly-executed by authorized representatives of both Parties.

17.5. **Severability.** If any provision hereof should be held invalid, illegal or unenforceable in any respect in any jurisdiction, the Parties will substitute, by mutual consent, valid provisions for such invalid, illegal or **unenforceable** provisions, which valid provisions in their economic effect are sufficiently similar to the invalid, illegal or unenforceable provisions that it can be reasonably assumed that the Parties would have entered into this Agreement with such valid provisions. In case such valid provisions cannot be agreed upon, the invalid, illegal or unenforceable nature of one or several provisions of this Agreement will not affect the validity of this Agreement as a whole, unless the invalid, illegal or unenforceable provisions are of such essential importance to this Agreement that it is to be reasonably assumed that the Parties would not have entered into this Agreement without the invalid, illegal or unenforceable provisions.

17.6. **Headings.** The captions to the Sections hereof are not a part of this Agreement, but are merely for convenience to assist in locating and reading the several Sections hereof.

17.7. **Waiver of Rule of Construction.** Each Party has had the opportunity to consult with counsel in connection with the review, drafting and **negotiation** of this Agreement. Accordingly, the rule of construction that any ambiguity in this Agreement will be construed against the drafting Party will not apply.

17.8. **Interpretation.** Except where the context expressly requires otherwise, (a) the use of any gender herein will be deemed to encompass references to either or both genders, and the use of the singular will be deemed to include **the** plural (and vice versa); (b) the words "include", "includes" and "including" will be deemed to be followed by the phrase "without limitation" and will not be interpreted to limit the provision to which it relates; (c) the word "shall" will be construed to have the same meaning and effect as the word "will"; (d) any definition of or reference to any agreement, instrument or other document herein will be construed as referring to such agreement, instrument or other document as from time to time amended, supplemented or otherwise modified (subject to any restrictions on such amendments, supplements or modifications set forth herein); (e) any reference herein to any Person will be construed to include the Person's successors and assigns; (f) the words "herein," "hereof," and "hereunder," and words of similar import, will be construed to refer to this Agreement in each of their entirety, as the context requires, and not to any particular provision hereof; (g) all references herein to Sections, Exhibits or Schedules will be construed to refer to sections or schedules of this Agreement, and references to this Agreement include all Exhibits and Schedules hereto; (h) the word "notice" means notice in writing (whether or not specifically stated) and will include notices, consents, approvals and other written communications contemplated under this Agreement; (i) provisions that require that a Party, the Parties or any committee hereunder "agree," "consent," or "approve" or the like will require that such agreement, consent or approval be specific and in writing, whether by written agreement, letter, approved minutes or otherwise (but excluding e-mail and instant messaging); (j) references to any specific law, rule or regulation, or article, section or other division thereof, will be deemed to include the then-current amendments thereto or any replacement or successor law, rule or regulation thereof; (k) the term "or" will be interpreted in the inclusive sense commonly associated with the term "and/or"; and (l) unless otherwise specified, "day" means a calendar day.

17.9. **No Implied Waivers; Rights Cumulative.** No failure on the part of Wave or Takeda to exercise, and no delay in exercising, any right, power, remedy or privilege under this Agreement, or provided by statute or at Law or in equity or **otherwise**, will impair, prejudice or constitute a waiver of any such right, power, remedy or privilege or be construed as a waiver of any breach of this Agreement or as an acquiescence therein, nor will any single or partial exercise of any such right, power, remedy or privilege preclude any other or further exercise thereof or the exercise of any other right, power, remedy or privilege.

17.10. **Notices.** All notices which are required or permitted hereunder will be in writing and sufficient if delivered personally, sent by facsimile (and promptly confirmed by personal delivery, registered or certified mail or overnight courier), sent by nationally-recognized overnight courier or sent by registered or certified mail, postage prepaid, return receipt requested, addressed as follows:

If to Wave, to:

Wave Life Sciences
733 Concord Avenue
Cambridge, Massachusetts 02138
Attention: Chief Executive Officer

With a copy to:	Goodwin Procter LLP 100 Northern Avenue Boston, Massachusetts 02210 Attention: Sarah A. Solomon, Esq. Facsimile No.: (415) 390-7962
If to Takeda, to:	Takeda Pharmaceuticals U.S.A., Inc. One Takeda Parkway Deerfield, IL 60015 Attention: General Counsel Facsimile No.: (224) 554-7831
With a copy to:	Ropes & Gray LLP Prudential Tower 800 Boylston Street Boston, MA 02199-3600 Attention: David M. McIntosh Facsimile No.: (617) 235-0507

or to such other address as the Party to whom notice is to be given may have furnished to the other Party in writing in accordance herewith. Any such notice will be deemed to have been given: (a) when delivered if personally delivered on a Business Day (or if delivered or sent on a non-Business Day, then on the next Business Day); (b) on the Business Day of receipt if sent by overnight courier or facsimile; or (c) on the Business Day of receipt if sent by mail.

17.11. Compliance with Export Regulations. Neither Party will export any technology licensed to it by the other Party under this Agreement except in compliance with U.S. export Laws and regulations.

17.12. Force Majeure. Neither Party will be held liable to the other Party nor be deemed to have defaulted under or **breached** this Agreement for failure or delay in performing any obligation under this Agreement to the extent that such failure or delay is caused by or results from causes beyond the reasonable control of the affected Party, potentially including embargoes, war, acts of war (whether war be declared or not), insurrections, riots, civil commotions, strikes, lockouts, or other labor disturbances, fire, earthquakes, floods, or other acts of God. The affected Party will notify the other Party of such force majeure circumstances as soon as reasonably practical, and will promptly undertake all reasonable efforts necessary to cure such force majeure circumstances and resume performance of its obligations hereunder.

17.13. Independent Parties. It is expressly agreed that Wave and Takeda will be independent contractors and that, except as otherwise required by applicable Law, the relationship between Wave and Takeda will not constitute a **partnership** (including for U.S. federal Tax purposes), joint venture, or agency. Wave will not have the authority to make any statements, representations, or commitments of any kind, or to take any action, that will be binding on Takeda, without the prior written consent of Takeda, and Takeda will not have the authority to make any statements, representations, or commitments of any kind, or to take any action, that will be binding on Wave, without the prior written consent of Wave.

Portions of this Exhibit, indicated by the mark "[***]," were omitted and have been filed separately with the Securities and Exchange Commission pursuant to the Registrant's application requesting confidential treatment pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

17.14. Counterparts. This Agreement may be executed in two or more counterparts, including by facsimile or PDF signature pages, each of which will be deemed an original, but all of which together will constitute one and the same instrument.

17.15. Further Assurances. The Parties agree to reasonably cooperate with each other in connection with any actions required to be taken as part of their respective obligations under this Agreement, and will (a) furnish to each other such further information; (b) execute and deliver to each other such other documents; and (c) do such other acts and things (including working collaboratively to correct any clerical, typographical, or other similar errors in this Agreement), all as the other Party may reasonably request for the purpose of carrying out the intent of this Agreement.

17.16. Performance by Affiliates. Each Party acknowledges and accepts that the other Party may exercise its rights and perform its obligations (including granting or continuing licenses and other rights) under this Agreement either directly or through one or more of its Affiliates. A Party's Affiliates will have the benefit of all rights (including all licenses and other rights) of such Party under this Agreement. Accordingly, in this Agreement "Takeda" will be interpreted to mean "Takeda or its Affiliates" and "Wave" will be interpreted to mean "Wave or its Affiliates" where necessary to give each Party's Affiliates the benefit of the rights provided to such Party in this Agreement and the ability to perform its obligations (including granting or continuing licenses and other rights) under this Agreement; *provided*, *however*, that in any event each Party will remain responsible for the acts and omissions, including financial liabilities, of its Affiliates.

17.17. Binding Effect; No Third Party Beneficiaries. As of the Effective Date, this Agreement will be binding upon and inure to the benefit of the Parties and their respective permitted successors and permitted assigns. Except as expressly set forth in this Agreement, no Person other than the Parties and their respective Affiliates and permitted assignees hereunder will be deemed an intended beneficiary hereunder or have any right to enforce any obligation of this Agreement.

17.18. HSR Act.

17.18.1. HSR Filing. Each of Wave and Takeda will file any HSR Filing with the FTC and the Antitrust Division of the DOJ required under the HSR Act with respect to the subject matter of this Agreement within ten (10) Business Days after the Execution Date, which forms will specifically request early termination of the initial HSR Act waiting period. The Parties will cooperate with one another to the extent reasonably necessary in the preparation of any such HSR Filing. Each Party is responsible for its own costs and expenses. The Parties each agree to pay one-half of the premerger filing fees applicable to the HSR Filings. The Parties will use all reasonable efforts to respond on a timely basis to any requests for additional information made by either the FTC or DOJ.

17.18.2. Efforts. Each of Wave and Takeda hereby covenants and agrees to use reasonable efforts to secure, and not to take any action that will have the effect of delaying, impairing, or impeding, the early termination or expiration of any waiting periods under the HSR Act for the transactions contemplated hereby. In connection with the foregoing notifications and filings under the HSR Act, the Parties will each cooperate reasonably with one another in connection with resolving any inquiry or investigation by the DOJ or FTC relating to their respective HSR Filings or the transactions contemplated hereby. Without limiting the foregoing, each Party will (a) promptly inform the other Party of any written or oral communication received from DOJ or FTC relating to its HSR Filing or the transactions contemplated hereby (and if in writing, furnish the other Party with a copy of such communication); (b) respond as

promptly as practicable to any request from DOJ or FTC for information, documents or other materials in connection with a review of the transactions contemplated hereby; (c) provide to the other Party, and permit the other Party to review and comment in advance of submission, all proposed correspondence, filings, and written communications to DOJ or FTC with respect to the transactions contemplated hereby; and (d) not participate in any substantive meeting or discussion with DOJ or FTC in respect of investigation or inquiry concerning the transactions contemplated hereby unless it consults with the other Party in advance and, except as prohibited by applicable Law or DOJ or FTC, gives the other Party the opportunity to attend and participate therein; *provided, however,* such Party will not be under any obligation to reschedule any meetings or conferences with the FTC, the DOJ, or any other applicable Governmental Authority to enable the other Party to attend. The Parties will consult and cooperate with each other, and consider in good faith the views of one another, in connection with any analyses, appearances, presentations, memoranda, briefs, arguments, opinions, and proposals made or submitted by or on behalf of any Party in connection with proceedings under or relating to any Antitrust Law, except as may be prohibited or restricted by Law.

17.18.3. **No Antitrust Undertakings**. Notwithstanding anything to the contrary in this Agreement, the term "reasonable efforts" as used in this Section 17.18 (HSR Act) does not require that either Party (a) offer, negotiate, commit to, or effect, by consent decree, hold separate order, trust, or otherwise, the sale, divestiture, license, or other disposition of any capital stock, assets, rights, products or businesses of such Party or any of its Affiliates, (b) agree to any restriction on the activities of such Party or any of its Affiliates, or (c) pay any material amount, or take any other action to prevent, effect the dissolution of, vacate, or lift any decree, order, judgment, injunction, temporary restraining order, or other order in any suit, or proceeding that would otherwise have the effect of preventing or delaying any of the transactions contemplated by this Agreement.

17.18.4. **Effective Date**. Except for the specific provisions expressly identified in Section 17.18 (HSR Act), this Agreement will not be effective until the date on which each of the following conditions are satisfied: (a) the HSR Conditions are met and (b) the Closing of the Share Purchase Agreement (where "Closing" will have the meaning set forth in the Share Purchase Agreement) (such date the "**Effective Date**"). At the election of either Party, immediately upon notice to the other Party, this Agreement will become null and void and have no further force or effect (i) in the event that the FTC or DOJ obtains a preliminary injunction against the Parties to enjoin the transaction contemplated by this Agreement, or (ii) in the event any applicable waiting periods under the HSR Act have not expired or been terminated on or prior to one hundred eighty (180) days after the Execution Date.

17.18.5. **Full Force and Effect**. Notwithstanding Section 17.18.4 (Effective Date) or anything in this Agreement to the contrary, the following provisions of this Agreement will be in full force and effect as of the Execution Date: Section 1 (Definitions) (to the extent applicable to the other Sections), Section 12 (Confidentiality and Publication), Section 13.1 (Mutual Representations and Warranties as of the Execution Date), Section 13.2 (Representations and Warranties by Wave), Section 13.5.2 (Retention of Title), Section 13.5.3 (Know-How), Section 13.5.4 (Conflicting Transactions), Section 13.5.5 (In-Licenses), and Section 17 (Miscellaneous).

[THE REMAINDER OF THIS PAGE HAS BEEN LEFT INTENTIONALLY BLANK]

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their duly authorized representatives as of the Execution Date.

WAVE LIFE SCIENCES USA, INC.

BY: /s/ Keith Regnante

NAME: Keith Regnante

TITLE: CFO

WAVE LIFE SCIENCES UK LIMITED

BY: /s/ Michael Panzara

NAME: Michael Panzara

TITLE: Franchise Lead, Neurology

TAKEDA PHARMACEUTICAL COMPANY LIMITED

BY: /s/ Fumihiko Sato

NAME: Fumihiko Sato

TITLE: Head of Portfolio Strategic Relations

Portions of this Exhibit, indicated by the mark "[***]," were omitted and have been filed separately with the Securities and Exchange Commission pursuant to the Registrant's application requesting confidential treatment pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

SCHEDULE 1.28
CANDIDATE CATEGORY 1 TARGETS

Target 1: HTT (NCBI Entrez Gene ID: 3064)

- [***].
- [***].

Target 2: ATXN3 (NCBI Entrez Gene ID: 4287)

Target 3: C9orf72 (NCBI Entrez Gene ID: 203228)

For clarity, the Option for Target 1 may be exercised in accordance with Section 3.2 (HTT Target).

SCHEDULE 1.80
DATA PACKAGE

[***].

Notwithstanding the generality of the foregoing, the following items will be included in the Data Package for the relevant target:

I. mHTT
   a. Clinical
      [***]
   b. Toxicology Reports
      [***]
   c. Biomarker Assays
      [***]

II. C9orf72
   a. Clinical
      [***]
   b. Toxicology
      [***]
   c. Assays
      [***]

SCHEDULE 1.95
OTHER ELIGIBLE DEVELOPMENT EXPENSES

[***].

Portions of this Exhibit, indicated by the mark "[***]," were omitted and have been filed separately with the Securities and Exchange Commission pursuant to the Registrant's application requesting confidential treatment pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

SCHEDULE 1.156
LEAD INITIAL HTT COMPOUNDS

WVE-120101

WVE-120102

Portions of this Exhibit, indicated by the mark "[***]," were omitted and have been filed separately with the Securities and Exchange Commission pursuant to the Registrant's application requesting confidential treatment pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

SCHEDULE 1.216
FORM OF OPTION EXERCISE NOTICE

Takeda Pharmaceuticals U.S.A., Inc.
One Takeda Parkway
Deerfield, IL 60015
Attention: General Counsel

[_____, 20__]

Wave Life Sciences
733 Concord Avenue
Cambridge, Massachusetts 02138
Attention: Chief Executive Officer

Dear Sir or Madam:

In accordance with Section 1.216 (Option Exercise Notice) of that certain Collaboration and License Agreement dated [_____] by and among Wave Life Sciences USA, Inc., Wave Life Sciences UK Limited, and Takeda Pharmaceutical Company Limited ("Takeda") (the "Collaboration Agreement"), Takeda is hereby providing written notice of its exercise of an Option with respect to the following Candidate Category 1 Target: [_____]. Capitalized terms used but not defined herein have the meanings assigned to them in the Collaboration Agreement.

Very truly yours,

Takeda Pharmaceutical Company Limited

By: _____
Name:
Title:

cc: Goodwin Procter LLP
100 Northern Avenue
Boston, MA 02210
Attn: Sarah A. Solomon, Esq.

SCHEDULE 1.242
POM CRITERIA

- mHTT program
  [***]
- C9orf72 program
  [***]
- ATXN3 program
  [***]

Portions of this Exhibit, indicated by the mark "[***]," were omitted and have been filed separately with the Securities and Exchange Commission pursuant to the Registrant's application requesting confidential treatment pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

SCHEDULE 1.283
TAKEDA PATENTS

No	Title	Abstract
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]

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SCHEDULE 4.1
FORM OF PROPOSED CATEGORY 2 TARGET NOMINATION NOTICE

Dear JSC:

In accordance with Section 4.1 (Proposed Category 2 Targets) of that certain Collaboration and License Agreement dated [_____] by and among Wave Life Sciences USA, Inc., Wave Life Sciences UK Limited, and Takeda Pharmaceutical Company Limited (the "Collaboration Agreement"), [_____] is hereby nominating the target described in Exhibit A attached hereto for consideration of such target as a possible Licensed Category 2 Target. Capitalized terms used but not defined herein have the meanings assigned to them in the Collaboration Agreement.

Very truly yours,

[Takeda or Wave]

By: _____
Name:
Title:

Exhibit A

Proposed Category 2 Target: _____.

Portions of this Exhibit, indicated by the mark "[***]," were omitted and have been filed separately with the Securities and Exchange Commission pursuant to the Registrant's application requesting confidential treatment pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

SCHEDULE 5.1.2(a)
HTT CANDIDATE CATEGORY 1 DEVELOPMENT PLAN

[***]

Portions of this Exhibit, indicated by the mark "[***]," were omitted and have been filed separately with the Securities and Exchange Commission pursuant to the Registrant's application requesting confidential treatment pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

SCHEDULE 5.1.2(b)
C9orf72 CANDIDATE CATEGORY 1 DEVELOPMENT PLAN

[***]

Portions of this Exhibit, indicated by the mark "[***]," were omitted and have been filed separately with the Securities and Exchange Commission pursuant to the Registrant's application requesting confidential treatment pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

SCHEDULE 5.1.3
FORM OF LICENSED CATEGORY 1 DEVELOPMENT BUDGET

Cost Type	Budget	Description	Who Prepares Initial Draft	Who Updates	Who Approves	Timing
[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]

Portions of this Exhibit, indicated by the mark "[***]," were omitted and have been filed separately with the Securities and Exchange Commission pursuant to the Registrant's application requesting confidential treatment pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

SCHEDULE 7.7(a)
CLINICAL SUPPLY TERM SHEET

Summary	This Term Sheet summarizes the key terms for the Clinical Supply Agreement (the "**Clinical Supply Agreement**"). The Clinical Supply Agreement covers Wave's Manufacturing and supply of applicable Collaboration Compounds, Collaboration Products, and Companion Diagnostics directed to a Collaboration Product ("**Supply Products**") to Takeda for Development purposes. Any capitalized terms used herein that are not defined shall have the meanings assigned to them in the Agreement.
1. General Supply Terms	
Purchase and Supply	[***]
Term	[***]
Subcontracting	[***]
2. Ordering and Forecasting	
Forecasting Under Clinical Supply Agreement	[***]
Statements of Work Under Clinical Supply Agreement	[***]
Purchase Orders Under Clinical Supply Agreement	[***]
Delivery Terms	[***]
3. Second Source	
Second Sourcing	[***]
4. Supply Shortfall	
Shortages	[***]
5. Quality; Non-Conforming Product	
Manufacturing Quality & Documentation	[***]
Compliance Audits	[***]
6. Other Terms	
Other Customary Provisions	[***]

Portions of this Exhibit, indicated by the mark "[***]," were omitted and have been filed separately with the Securities and Exchange Commission pursuant to the Registrant's application requesting confidential treatment pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

SCHEDULE 7.7(b)
COMMERCIAL SUPPLY TERM SHEET

Summary	This Term Sheet summarizes the key terms for the Commercial Supply Agreement (the "**Commercial Supply Agreement**"). The Commercial Supply Agreement covers Wave's Manufacturing and supply of applicable Collaboration Compounds, Collaboration Products, and Companion Diagnostics directed to a Collaboration Product ("**Supply Products**") to Takeda for Commercialization purposes. Any capitalized terms used herein that are not defined shall have the meanings assigned to them in the Agreement.
1. General Supply Terms	
Purchase and Supply	[***]
Term	[***]
Subcontracting	[***]
2. Ordering and Forecasting	
Forecasting Under Commercial Supply Agreement	[***]
Purchase Orders Under Commercial Supply Agreement	[***]
Delivery Terms	[***]
3. Second Source	
Second Sourcing	[***]
4. Supply Shortfall	
Shortages	[***]
5. Quality; Non-Conforming Product	
Manufacturing Quality & Documentation	[***]
Compliance Audits	[***]
6. Other Terms	
Other Customary Provisions	[***]

Portions of this Exhibit, indicated by the mark "[***]," were omitted and have been filed separately with the Securities and Exchange Commission pursuant to the Registrant's application requesting confidential treatment pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

SCHEDULE 8.1.2
FORM OF LICENSED CATEGORY 1 COMMERCIALIZATION BUDGET

Cost Type	Budget	Description	Who Prepares Initial Draft	Who Updates	Who Approves	Timing
[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]

Portions of this Exhibit, indicated by the mark "[***]," were omitted and have been filed separately with the Securities and Exchange Commission pursuant to the Registrant's application requesting confidential treatment pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

SCHEDULE 10.4.1
TAKEDA SUBLICENSING RIGHTS

[***]

Portions of this Exhibit, indicated by the mark "[***]," were omitted and have been filed separately with the Securities and Exchange Commission pursuant to the Registrant's application requesting confidential treatment pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

SCHEDULE 11.3.4
LICENSED CATEGORY 1 PROFIT & LOSS SHARE

This Schedule 11.3.4 to the Agreement covers financial planning, accounting policies and procedures to be followed in determining the U.S. Licensed Category 1 Profit & Loss Share and the Ex-U.S. Territory Licensed Category 1 Profit & Loss Share. The U.S. Licensed Category 1 Profit & Loss Share and the Ex-U.S. Territory Licensed Category 1 Profit & Loss Share are not legal entities and have been defined for identification purposes only.

[***]

[***]	[***]	[***]	[***]
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Portions of this Exhibit, indicated by the mark "[***]," were omitted and have been filed separately with the Securities and Exchange Commission pursuant to the Registrant's application requesting confidential treatment pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

SCHEDULE 12.2.1(a)

WAVE PRESS RELEASE

Portions of this Exhibit, indicated by the mark "[***]," were omitted and have been filed separately with the Securities and Exchange Commission pursuant to the Registrant's application requesting confidential treatment pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

Wave Life Sciences and Takeda Form Global Strategic Collaboration to Advance Therapies for Central Nervous System Disorders

Wave to receive at least $230 million, including $110 million in upfront cash, $60 million in equity investment and at least $60 million in research support

Takeda to receive option to co-develop and co-commercialize investigational therapies in HD, ALS, FTD and SCA3 under a global 50:50 profit-split

Takeda to receive right to license additional preclinical CNS programs; Wave eligible to receive more than $1 billion in potential precommercial milestones

CAMBRIDGE, Mass., February 20, 2018 – Wave Life Sciences Ltd. (NASDAQ: WVE), a biotechnology company focused on delivering transformational therapies for patients with serious, genetically-defined diseases, today announced the formation of a global strategic collaboration with Takeda Pharmaceutical Company Limited to discover, develop and commercialize nucleic acid therapies for disorders of the central nervous system (CNS). Under the collaboration, Wave will provide Takeda the option to co-develop and co-commercialize programs in Huntington's disease (HD), amyotrophic lateral sclerosis (ALS), frontotemporal dementia (FTD) and spinocerebellar ataxia type 3 (SCA3). In addition, Takeda will have the right to license multiple preclinical programs targeting CNS disorders, including Alzheimer's disease and Parkinson's disease. Wave will continue to independently advance its activities in neuromuscular diseases, including its lead clinical program for the treatment of Duchene muscular dystrophy (DMD).

Under terms of the two-component agreement, Takeda will make an initial payment of $110 million to Wave and purchase $60 million of Wave's ordinary shares at $54.70 per share. Takeda will also fund at least $60 million of Wave research over a four-year period to advance multiple preclinical targets selected by and licensed to Takeda.

"We are thrilled to be joining with Takeda in this ambitious alliance to bring meaningful therapies to patients suffering from devastating neurological diseases," said Paul Bolno, MD, MBA, President and Chief Executive Officer of Wave Life Sciences. "This partnership provides additional resources to advance our clinical programs through multiple data readouts while continuing to expand our pipeline in

neurology and other therapeutic areas. We look forward to working with Takeda and leveraging our expertise in oligonucleotides and clinical capabilities to grow our company and continue to make scientific and medical advances on behalf of patients."

"At Takeda, we are focused on partnering with companies that share our research focus and commitment to deliver transformative medicines to patients," Daniel Curran, MD, Head, Center for External Innovation at Takeda. "Wave's expertise in optimizing oligonucleotides offers a complementary approach to programs that Takeda is currently pursuing for neurological disorders, maximizing our potential for success, and their pipeline and focus are closely aligned with our own."

The first component of the agreement grants Takeda with the option to co-develop and co-commercialize the following nucleic acid investigational therapies upon Wave demonstrating proof of mechanism in initial clinical studies:

- WVE-120101 and WVE-120102, which selectively target the mutant allele of the *huntingtin (HTT)* gene and are currently in Phase 1b/2a clinical trials for the treatment of HD
- WVE-3972-01, which targets the *C9ORF72* gene and is expected to be evaluated in clinical studies for the treatment of ALS and FTD beginning in Q4 2018
- Program targeting the *ATXN3* gene for the treatment of SCA3

Upon opt-in by Takeda on any individual program, Wave will receive an opt-in payment and will lead manufacturing and joint clinical co-development activities; Takeda will lead joint co-commercial activities in the United States and all commercial activities outside of the United States. Global costs and potential profits will be shared 50:50 and Wave will be eligible to receive development and commercial milestone payments.

The second component of the strategic collaboration provides Takeda with the right to license multiple preclinical programs for CNS indications, including Alzheimer's disease and Parkinson's disease. During a four-year term, the companies may collaborate on up to six preclinical targets at any one time. Takeda will fund at least $60 million of Wave's preclinical activities and reimburse Wave for agreed-upon additional expenses. Assuming Takeda advances six programs that achieve regulatory approval and commercial milestones, Wave will be eligible to receive more than $2 billion in cash milestone payments, of which more than $1 billion would be in precommercial milestone payments. Wave is also eligible to receive tiered high single-digit to mid-teen royalty payments on global commercial sales of each licensed program.

The collaboration agreement will become effective upon satisfaction of customary closing conditions, including the requirements of the Hart-Scott-Rodino Antitrust Improvements Act of 1976.

Outside of the collaboration with Takeda, Wave continues to independently advance its activities in neuromuscular diseases, including its lead DMD program, an investigational therapy targeting exon 51 (WVE-210201) currently in a Phase 1 clinical trial. Wave's next DMD program, targeting exon 53, is expected to initiate clinical development in Q1 2019. The company also continues to expand its preclinical research pipeline in other therapeutic areas, including metabolic liver diseases in collaboration with Pfizer and ophthalmology where Wave has wholly-owned discovery programs.

About WVE-120101 and WVE-120102

HD is an autosomal-dominant, progressive neurodegenerative disorder caused by an expanded cytosine-adenine-guanine (CAG) triplet repeat in the *HTT* gene that results in production of mutant HTT (mHTT) protein. Accumulation of mHTT protein causes progressive loss of neurons in the brain. Wild-type, or healthy, HTT (wtHTT) protein is critical for neuronal function, and research suggests that long-term suppression may have detrimental consequences. WVE-120101 and WVE-120102 are investigational stereopure antisense oligonucleotides designed to selectively target the m*HTT* mRNA transcript of SNP rs362307 (SNP1) and SNP rs362331 (SNP2), respectively. *In vitro* studies in patient-derived cell lines have shown that WVE-120101 and WVE-120102 selectively reduce levels of m*HTT* mRNA and protein, while leaving wt*HTT* mRNA and protein largely intact.

About WVE-3972-01

ALS and FTD can be caused by mutations in the *C9ORF72* gene, which provides instructions for making protein found in various tissues, including nerve cells in the cerebral cortex and motor neurons. WVE-3972-01 is an investigational stereopure antisense oligonucleotide designed to preferentially target the pathogenic allele of the *C9ORF72* gene. *In vivo* studies conducted in a transgenic animal model containing the mutated *C9ORF72* gene demonstrated that WVE-3972-01 produced significant and sustained preferential knockdown of disease-associated biomarkers such as repeat-containing transcripts, RNA foci and dipeptide repeat proteins without altering total C9ORF72 protein levels.

About Wave Life Sciences

Wave Life Sciences is a biotechnology company focused on delivering transformational therapies for patients with serious, genetically-defined diseases. Our chemistry platform enables the creation of highly specific, well characterized oligonucleotides designed to deliver superior efficacy and safety across multiple therapeutic modalities. Our pipeline is initially focused on neurological disorders and extends across several other therapeutic areas. For more information, please visit www.wavelifesci.com.

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, as amended, including, without limitation, statements regarding the collaboration and license agreement between Wave and Takeda, including anticipated payments, as well as the future discovery, development, manufacture and commercialization of potential therapies for CNS disorders under the agreement; Wave's and Takeda's ability to successfully develop and commercialize potential therapies for CNS disorders; and Wave's strategy and business plans. The words "may," "will," "could," "would," "should," "expect," "plan," "anticipate," "intend," "believe," "estimate," "predict," "project," "potential," "continue," "target" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Any forward-looking statements in this press release are based on management's current expectations and beliefs and are subject to a number of risks, uncertainties and important factors that may cause actual events or results to differ materially from those expressed or implied by any forward-looking statements contained in this press release, including, without limitation, risks and uncertainties related to Wave's ability to successfully advance multiple potential preclinical programs simultaneously on its platform; the delay of any current or planned clinical trials or the other development activities for Wave's investigational therapies; Wave's ability to successfully demonstrate the safety and efficacy of its investigational therapies; the preclinical and clinical results of Wave's investigational therapies; actions

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of regulatory authorities that may affect the initiation, timing and progress of clinical trials; and Wave's ability to successfully commercialize any investigational therapies that receive regulatory approval. These and other risks and uncertainties are described in greater detail in the section entitled "Risk Factors" in Wave's Annual Report on Form 10-K for the year ended December 31, 2016, as filed with the Securities and Exchange Commission (SEC) on March 16, 2017, and other filings that Wave may make with the SEC from time to time. Any forward-looking statements contained in this press release represent Wave's views only as of the date hereof and should not be relied upon as representing its views as of any subsequent date. Wave explicitly disclaims any obligation to update any forward-looking statements.

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SCHEDULE 12.2.1(b)

TAKEDA PRESS RELEASE

Portions of this Exhibit, indicated by the mark "[***]," were omitted and have been filed separately with the Securities and Exchange Commission pursuant to the Registrant's application requesting confidential treatment pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

Takeda Deepens Commitment to Develop Innovative Treatments for Neurological Diseases

Collaboration with Wave Life Sciences Ltd. to discover and develop best-in-class antisense oligonucleotides for potential treatment of genetically-defined neurological diseases

Osaka, Japan, February 20, 2018 – Takeda Pharmaceutical Company Limited (TSE: 4502) today announced that it has entered into a research, development and commercial collaboration and multi-program option agreement with Wave Life Sciences Ltd. (Wave) to develop antisense oligonucleotides for genetically-defined neurological diseases. This partnership supports Takeda's externalization strategy, which focuses on collaborations that complement its internal pipeline of programs, and represents the next generation of innovative therapies to treat diseases with no current treatment options.

"Takeda is deeply committed to pursuing innovative approaches in neuroscience research and development," said Emiliangelo Ratti, Head, Neuroscience Therapeutic Area Unit at Takeda. "Our collaboration with Wave will further enable our focus to accelerate the development of transformational therapies for patients for whom there are currently no treatments available."

The first component of the collaboration with Wave will focus on programs targeting Huntington's disease (HD), amyotrophic lateral sclerosis (ALS) (commonly referred to as Lou Gehrig's disease), frontotemporal dementia (FTD) and spinocerebellar ataxia type 3 (SCA3). Wave is developing oligonucleotide therapeutics to target diseases that have been historically difficult to treat with small molecules or biologics. Their molecules are designed to reduce the expression of disease-promoting proteins or to transform the production of dysfunctional mutant proteins into the production of functional proteins, with the potential of treating the targeted disease. The first component of this collaboration will investigate the following potential therapies with the option to co-develop and co-commercialize after demonstration of clinical proof of mechanism:

- WVE-120101 and WVE-120102, which selectively target mutant huntingtin and are currently in Phase 1b/2a clinical trials for the treatment of HD
- WVE-3972-01, which targets C9ORF72 and is expected to be evaluated in clinical studies for the treatment of ALS and FTD beginning in Q4 2018
- Program targeting ATXN3 for the treatment of SCA3

The second component of the collaboration provides Takeda with the rights to exclusively license multiple preclinical programs targeting other neurological disorders including Alzheimer's disease and Parkinson's disease. At any one time during a four-year term, the companies may collaborate on up to six preclinical programs.

“At Takeda, we are focused on partnering with companies that share our research focus and commitment to deliver transformative medicines to patients,” said Daniel Curran, M.D., Head, Center for External Innovation at Takeda. “Wave’s expertise in optimizing oligonucleotides offers a complementary approach to programs that Takeda is currently pursuing for neurological disorders, maximizing our potential for success, and their pipeline and focus are closely aligned with our own.”

This collaboration with Wave is part of Takeda’s overall partnership strategy and deepened commitment in neuroscience, which also includes recently signed collaboration agreements with Mindstrong Health to explore the development of digital biomarkers for selected mental health conditions, and Denali Therapeutics, a company with an innovative platform technology for transporting antibodies into the brain, to develop and commercialize therapies for neurodegenerative diseases.

About Takeda Neuroscience
Neuroscience is a core therapeutic area for Takeda. Our aspiration is to provide innovative medicines for targeted patient populations suffering from neuropsychiatric disorders for whom there are no treatments available. We identify targets either genetically linked with specific neuropsychiatric disorders or with high association to the disease pathophysiology, design and operationalize clinical trials in novel ways in an effort to overcome historical challenges, and collaborate with patients, academic institutions, pharmaceutical and biotechnology partners, payors, regulators and prescribers to integrate their unique expertise and perspective. Takeda’s current portfolio consists of four approved medicines to treat adults with Major Depressive Disorder (MDD), Alzheimer’s-type dementia, insomnia and multiple sclerosis. In addition, there are many novel compounds in clinical development for targeted patient populations.

About Takeda Pharmaceutical Company
Takeda Pharmaceutical Company Limited (TSE: 4502) is a global, research and development-driven pharmaceutical company committed to bringing better health and a brighter future to patients by translating science into life-changing medicines. Takeda focuses its R&D efforts on oncology, gastroenterology and neuroscience therapeutic areas plus vaccines. Takeda conducts R&D both internally and with partners to stay at the leading edge of innovation. New innovative products, especially in oncology and gastroenterology, as well as Takeda’s presence in emerging markets, are currently fueling the growth of Takeda. Approximately 30,000 Takeda employees are committed to improving quality of life for patients, working with Takeda’s partners in health care in more than 70 countries. For more information, visit https://www.takeda.com/newsroom/.

Takeda’s Forward-Looking Statements
This press release contains “forward-looking statements.” Forward-looking statements include all statements other than statements of historical fact, including plans, strategies and expectations for the future, statements regarding the expected timing of filings and approvals relating to the transaction, the expected timing of the completion of the transaction, the ability to complete the transaction or to satisfy the various closing conditions, future revenues and profitability from or growth or any assumptions underlying any of the foregoing. Statements made in the future tense, and words such as “anticipate,” “expect,” “project,” “continue,” “believe,” “plan,” “estimate,” “pro forma,” “intend,” “potential,” “target,” “forecast,” “guidance,” “outlook,” “seek,” “assume,” “will,” “may,” “should,” and similar expressions are intended to qualify as forward-looking statements. Forward-looking statements are based on estimates and assumptions made by management that are believed to be reasonable, though they are inherently uncertain and difficult to predict. Investors and security holders are cautioned not to place undue reliance on these forward-looking statements.

Portions of this Exhibit, indicated by the mark “[***],” were omitted and have been filed separately with the Securities and Exchange Commission pursuant to the Registrant’s application requesting confidential treatment pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

Forward-looking statements involve risks and uncertainties that could cause actual results or experience to differ materially from that expressed or implied by the forward-looking statements. Some of these risks and uncertainties include, but are not limited to: required regulatory approvals for the transaction may not be obtained in a timely manner, if at all; the conditions to closing of the transaction may not be satisfied; competitive pressures and developments; applicable laws and regulations; the success or failure of product development programs; actions of regulatory authorities and the timing thereof; changes in exchange rates; and claims or concerns regarding the safety or efficacy of marketed products or product candidates in development.

The forward-looking statements contained in this press release speak only as of the date of this press release, and neither Wave nor Takeda undertake any obligation to revise or update any forward-looking statements to reflect new information, future events or circumstances after the date of the forward-looking statement. If one or more of these statements is updated or corrected, investors and others should not conclude that additional updates or corrections will be made.

# # #

Takeda Contact:
Kelly Schlemm, +1-617-551-8865
kelly.schlemm@takeda.com

Portions of this Exhibit, indicated by the mark "[***]," were omitted and have been filed separately with the Securities and Exchange Commission pursuant to the Registrant's application requesting confidential treatment pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

SCHEDULE 13.2.1

WAVE PATENTS AND IN-LICENSES

WAVE PATENTS

FAMILY	FILING(S)
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WAVE IN-LICENSES

[***].

Portions of this Exhibit, indicated by the mark "[***]," were omitted and have been filed separately with the Securities and Exchange Commission pursuant to the Registrant's application requesting confidential treatment pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

Exhibit 10.2

SHARE PURCHASE AGREEMENT

By and Between

TAKEDA PHARMACEUTICAL COMPANY LIMITED

AND

WAVE LIFE SCIENCES LTD.

Dated as of February 19, 2018

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SHARE PURCHASE AGREEMENT

THIS SHARE PURCHASE AGREEMENT (this "**Agreement**"), dated as of February 19, 2018, by and between Takeda Pharmaceutical Company Limited, a company incorporated under the laws of Japan (the "**Investor**"), and Wave Life Sciences Ltd., a Singapore public limited company (the "**Company**").

WHEREAS, pursuant to the terms and subject to the conditions set forth in this Agreement, the Company desires to issue and sell to the Investor, and the Investor desires to subscribe for and purchase from the Company, ordinary shares, fully-paid up, no par value, of the Company (the "**Ordinary Shares**"); and

WHEREAS, in partial consideration for the Investor's willingness to enter into this Agreement, the Investor and the Company (or Affiliates thereof) are entering into the Collaboration Agreement and the Investor Agreement (each as defined below).

NOW, THEREFORE, in consideration of the following mutual promises and obligations, and for good and valuable consideration, the adequacy and sufficiency of which are hereby acknowledged, the Investor and the Company agree as follows:

1. Definitions.

1.1 Defined Terms. When used in this Agreement, the following terms shall have the respective meanings specified therefor below:

"**Affiliate**" shall mean, with respect to any Person, another Person which controls, is controlled by or is under common control with such Person. A Person shall be deemed to "**control**" another Person if any of the following conditions is met: (i) in the case of corporate entities, direct or indirect ownership of more than fifty percent (50%) of the stock or shares having the right to vote for the election of directors or otherwise having the power to control or direct the affairs of such Person; and (ii) in the case of non-corporate entities, direct or indirect ownership of more than fifty percent (50%) of the equity interest or the power to direct the management and policies of such non-corporate entities. For the purposes of this Agreement, in no event shall the Investor or any of its Affiliates be deemed Affiliates of the Company or any of its Affiliates, nor shall the Company or any of its Affiliates be deemed Affiliates of the Investor or any of its Affiliates.

"**Agreement**" shall have the meaning set forth in the Preamble, including all Exhibits attached hereto.

"**Business Day**" shall mean a calendar day other than a Saturday, Sunday, or a bank or other public holiday in Massachusetts or New York in the United States or in Tokyo in Japan.

"**Collaboration Agreement**" shall mean the Collaboration and License Agreement between the Company and the Investor, dated as of February 19, 2018.

"**Cross Receipt**" shall mean an executed document signed by each of the Company and the Investor, in substantially the form of Exhibit A attached hereto.

"**Effect**" shall have the meaning set forth in the definition of "Material Adverse Effect."

"**Governmental Authority**" shall mean any court, agency, authority, department, regulatory body or other instrumentality of any government or country or of any national, federal, state, provincial, regional, county, city or other political subdivision of any such government or country or any supranational organization of which any such country is a member.

"**Intellectual Property**" shall mean shall mean trademarks, trade names, trade dress, service marks, copyrights, and similar rights (including registrations and applications to register or renew the registration of any of the foregoing), patents and patent applications, trade secrets, and any other similar intellectual property rights.

"**Intellectual Property License**" shall mean any license, permit, authorization, approval, contract or consent granted, issued by or with any Person relating to the use of Intellectual Property.

"**Investor Agreement**" shall mean that certain Investor Agreement between the Investor and the Company, to be dated as of the Closing Date, in the form of Exhibit B attached hereto, as the same may be amended from time to time.

"**Law**" or "**Laws**" shall mean all laws, statutes, rules, regulations, orders, judgments, injunctions and/or ordinances of any Governmental Authority.

"**Material Adverse Effect**" shall mean any change, event or occurrence (each, an "**Effect**") that, individually or when taken together with all other Effects, has (i) a material adverse effect on the business, financial condition, assets, results of operations or prospects of the Company and its subsidiaries, taken as a whole, or (ii) a material adverse effect on the Company's ability to perform its obligations, or consummate the Transaction, in accordance with the terms of this Agreement, except in the case of (i) or (ii) to the extent that any such Effect results from or arises out of: (A) changes in conditions in the United States or global economy or capital or financial markets generally, including changes in interest or exchange rates, (B) changes in general legal, regulatory, political, economic or business conditions or changes in generally accepted accounting principles in the United States or interpretations thereof that, in each case, generally affect the biotechnology or biopharmaceutical industries, (C) the announcement, pendency or performance of this Agreement or the Collaboration Agreement or the identity of the Investor, (D) any change in the trading prices or trading volume of the Ordinary Shares (it being understood that the facts giving rise to or contributing to any such change may be deemed to constitute, or be taken into account when determining whether there has been or will be, a Material Adverse Effect, except to the extent any of such facts is an Effect referred in clauses (A) through (H) of this definition), (E) acts of war, sabotage or terrorism, or any escalation or worsening of any such acts of war, sabotage or terrorism, (F) earthquakes, hurricanes, floods or other natural disasters, (G) any action taken by the Company required by this Agreement or the Collaboration Agreement or with the Investor's written consent, (H) any breach, violation or non-performance by the Investor or any of its Affiliates under the Collaboration Agreement, or (I) shareholder litigation arising out of or in connection with the execution, delivery or performance of the Transaction Agreements; *provided*, that, with respect

to clauses (A), (B), (E) and (F), such Effect does not have a materially disproportionate and adverse effect on the Company relative to other companies in the biotechnology or biopharmaceutical industries.

"**Organizational Documents**" shall mean the constitution of Wave Life Sciences Ltd., dated as of July 23, 2012, as may be amended and/or restated from time to time.

"**Person**" shall mean any individual, partnership, firm, corporation, limited liability company, association, trust, unincorporated organization, government or any department or agency thereof or other entity, as well as any syndicate or group that would be deemed to be a Person under Section 13(d)(3) of the Exchange Act.

"**Third Party**" shall mean any Person other than the Investor, the Company or any Affiliate of the Investor or the Company.

"**Transaction**" means the issuance and sale of the Shares by the Company, and the purchase of the Shares by the Investor, in accordance with the terms hereof.

"**Transaction Agreements**" shall mean this Agreement, the Investor Agreement and the Collaboration Agreement.

1.2 Additional Defined Terms. In addition to the terms defined in Section 1.1, the following terms shall have the respective meanings assigned thereto in the sections indicated below:

Defined Term	Section
Aggregate Purchase Price	Section 2
Closing	Section 3.1
Closing Date	Section 3.1
Company	Preamble
Company Intellectual Property	Section 4.13(b)
Company SEC Documents	Section 4.11(a)
Exchange Act	Section 4.11(a)
HSR Act	Section 4.7
Investor	Preamble
Modified Clause	Section 11.7
Ordinary Shares	Preamble
Permits	Section 4.10
SEC	Section 4.7
Securities Act	Section 4.11(a)
Shares	Section 2
Termination Date	Section 9.1(b)

2. Purchase and Sale of Shares. Subject to the terms and conditions of this Agreement, at the Closing, the Company shall issue and sell to the Investor, free and clear of all liens, other than any liens arising as a result of any action by the Investor, and the Investor shall

purchase from the Company, 1,096,892 Ordinary Shares (the "**Shares**"), for $54.70 per share[1], or $59,999,992.40 in the aggregate (the "**Aggregate Purchase Price**"), *provided*, that if number of Ordinary Shares issuable at the Closing would be greater than 19.99% of the Ordinary Shares outstanding immediately prior to Closing, the number of Shares and the Aggregate Purchase Price shall be reduced such that, immediately following the Closing, the Investor holds 19.99% of outstanding Ordinary Shares (calculated immediately prior to the Closing). In the event of any share dividend, share split, combination of shares, recapitalization or other similar change in the capital structure of the Company after the date hereof and on or prior to the Closing which affects or relates to the Ordinary Shares, the number of Shares shall be adjusted proportionately.

3. Closing Date; Deliveries.

3.1 Closing Date. Subject to the satisfaction or waiver of all the conditions to the Closing set forth in Sections 6, 7 and 8 hereof, the closing of the purchase and sale of the Shares hereunder (the "**Closing**") shall be held on the third (3rd) Business Day after the satisfaction or waiver of the conditions to Closing set forth in Sections 6, 7 and 8 (other than those conditions that by their nature are to be satisfied at the Closing), at 10 a.m. Boston time, at the offices of Goodwin Procter LLP, 100 Northern Avenue, Boston, Massachusetts 02210, or at such other time, date and location as the parties may agree. The date the Closing occurs is hereinafter referred to as the "**Closing Date**."

3.2 Deliveries.

(a) Deliveries by the Company. At the Closing, the Company shall instruct its transfer agent to register the Shares in book-entry form. The Company will cause the relevant returns of allotment of the Shares to be filed with all relevant authorities in Singapore or elsewhere (if required) and updated in the registers of the Company. The Company shall also deliver at the Closing: (i) a duly executed Cross Receipt; (ii) a certificate in form and substance reasonably satisfactory to the Investor and duly executed on behalf of the Company by an authorized executive officer of the Company, certifying that the conditions to Closing set forth in Sections 6 and 8.3(b) of this Agreement have been fulfilled; (iii) a duly executed Investor Agreement; (iv) a legal opinion of Company's counsel in form and substance reasonably satisfactory to the Investor and (v) a certificate of the secretary of the Company dated as of the Closing Date certifying (A) that attached thereto are true and complete copies of the Organizational Documents in effect on the Closing Date; (B) that attached thereto is a true and complete copy of all resolutions adopted by the Board of Directors of the Company authorizing the execution, delivery and performance of the Transaction Agreements and the Transaction and that all such resolutions are in full force and effect and are all the resolutions adopted in connection with the transactions contemplated hereby as of the Closing Date; and (C) as to the incumbency and specimen signature of any officer of the Company executing a Transaction Agreement on behalf of the Company.

(b) Deliveries by the Investor. At the Closing, the Investor shall deliver to the Company the Aggregate Purchase Price by wire transfer of immediately available

[1] Note: The per share price is equal to the closing price per Ordinary Share on the Nasdaq Global Market on February 16, 2018.

United States funds to an account designated by the Company. The Company shall notify the Investor in writing of the wiring instructions for such account not less than five (5) Business Days before the Closing Date. The Investor shall also deliver, or cause to be delivered, at the Closing: (i) a duly executed Cross Receipt; (ii) a certificate in form and substance reasonably satisfactory to the Company duly executed by an authorized executive officer of the Investor certifying that the conditions to Closing set forth in Section 7 of this Agreement have been fulfilled; (iii) a duly executed Investor Agreement; and (iv) a certificate of the secretary of the Investor dated as of the Closing Date certifying as to the incumbency and specimen signature of any officer executing a Transaction Agreement on behalf of the Investor.

4. Representations and Warranties of the Company. The Company hereby represents and warrants to the Investor that:

4.1 Organization, Good Standing and Qualification.

(a) The Company is a public limited company duly organized, validly existing and in good standing under the laws of Singapore. The Company has all requisite corporate power and corporate authority to own, lease and operate its properties and assets, to carry on its business as now conducted, and as proposed to be conducted as described in the Company SEC Documents, to enter into the Transaction Agreements, to issue and sell the Shares to perform its obligations under and to carry out the other transactions contemplated by the Transaction Agreements.

(b) The Company is qualified to transact business as a foreign entity and is in good standing in each jurisdiction in which the character of the properties owned, leased or operated by the Company or the nature of the business conducted by the Company makes such qualification necessary, except where the failure to be so qualified would not have or be reasonably likely to have a Material Adverse Effect.

4.2 Capitalization and Voting Rights.

(a) As of January 31, 2018, 27,860,448 Ordinary Shares and 3,901,348 of the Company's Series A preferred shares were issued and outstanding. The issued and outstanding capital shares of the Company have been duly authorized and validly issued and are fully paid and nonassessable. None of the outstanding capital shares of the Company was issued in violation of the preemptive or other similar rights of any shareholder of the Company. There are no authorized or outstanding options, warrants, preemptive rights, rights of first refusal or other rights to purchase, or equity or debt securities convertible into or exchangeable or exercisable for, any capital shares of the Company or any of its subsidiaries other than those described or reflected in the Company SEC Documents, or pursuant to reservations, agreements or employee benefit plans or the exercise of convertible securities or options, in each case described or reflected in the Company SEC Documents.

(b) All of the authorized Ordinary Shares are entitled to one (1) vote per share.

(c) Except as described or referred to in Section 4.2(a) above or the Company SEC Documents or as provided in the Investor Agreement, as of the date hereof, there

are not: (i) any outstanding equity securities, options, warrants, rights (including conversion or preemptive rights) or other agreements pursuant to which the Company is or may become obligated to issue, sell or repurchase any shares of its capital shares or any other securities of the Company or (ii) except as set forth in the Investor Agreement, any restrictions on the transfer of capital shares of the Company other than pursuant to state and federal securities Laws.

(d) Except as provided in the Investor Agreement, the Company is not a party to or subject to any agreement or understanding relating to the voting of capital shares of the Company or the giving of written consents by a shareholder or director of the Company.

4.3 Subsidiaries. The Company has disclosed all of its "subsidiaries" (for purposes of this Agreement, as defined in Rule 405 under the Securities Act) required to be disclosed pursuant to Item 601(b)(21) of Regulation S-K in an exhibit to its Annual Report on Form 10-K. Each of the Company's subsidiaries has been duly incorporated or organized, as the case may be, and is validly existing as a corporation or company in good standing under the Laws of the jurisdiction of its incorporation or organization and has the power and authority (corporate or other) to own, lease and operate its properties and to conduct its businesses as presently conducted. Each of the Company's subsidiaries is duly qualified as a foreign corporation or company to transact business and is in good standing in each jurisdiction in which such qualification is required, whether by reason of the ownership or leasing of property or the conduct of business, except where the failure to so qualify or to be in good standing would not reasonably be expected to have a Material Adverse Effect. All of the issued and outstanding share capital or capital stock or other equity or ownership interests of each of the Company's subsidiaries have been duly authorized and validly issued, are fully paid and nonassessable and are owned by the Company, directly or through subsidiaries, free and clear of any security interest, mortgage, pledge, lien, encumbrance or adverse claim. The Company does not own or control, directly or indirectly, any corporation, association or other entity other than the subsidiaries listed in Company SEC Documents.

4.4 Authorization.

(a) All requisite corporate action on the part of the Company and its subsidiaries, and their respective directors and shareholders required by applicable Law for the authorization, execution and delivery by the Company and its subsidiaries of the Transaction Agreements and the performance of all obligations of the Company and its subsidiaries hereunder and thereunder, including the authorization, issuance and delivery of the Shares, has been taken.

(b) This Agreement and the Collaboration Agreement have been, and upon the execution and delivery of the Investor Agreement by the Company at the Closing, the Investor Agreement will be, duly executed and delivered by the Company or its subsidiaries (as applicable), and upon the due execution and delivery of this Agreement by the Investor, this Agreement and the Collaboration Agreement will constitute, and upon the due execution and delivery of the Investor Agreement by the Investor, the Investor Agreement will constitute, valid and legally binding obligations of the Company and its subsidiaries (as applicable), enforceable against such entities in accordance with their respective terms (except as such enforceability may be limited by (i) applicable bankruptcy, insolvency, reorganization, moratorium or other Laws of

general application relating to or affecting enforcement of creditors' rights and (ii) rules of Law governing specific performance, injunctive relief or other equitable remedies and limitations of public policy).

(c) No stop order or suspension of trading of the Ordinary Shares has been imposed by The Nasdaq Stock Market LLC, the SEC or any other Governmental Authority and remains in effect.

4.5 No Defaults. Neither the Company nor any of its subsidiaries is in default under or in violation of (a) the Organizational Documents or a subsidiary's organizational documents, (b) any provision of applicable Law or any ruling, writ, injunction, order, Permit, judgment or decree of any Governmental Authority or (c) any agreement, arrangement or instrument, whether written or oral, by which the Company, its subsidiaries or any of the Company's or subsidiaries' assets are bound, except, in the case of subsections (b) and (c), as would not have or be reasonably likely to have a Material Adverse Effect. To the knowledge of the Company, there exists no condition, event or act which after notice, lapse of time, or both, would constitute a default or violation by the Company under any of the foregoing, except, in the case of subsections (b) and (c), as would not have or be reasonably likely to have a Material Adverse Effect.

4.6 No Conflicts. The execution, delivery and performance of the Transaction Agreements, and compliance with the provisions hereof and thereof by the Company and its subsidiaries do not and shall not: (a) violate any provision of applicable Law or any ruling, writ, injunction, order, permit, judgment or decree of any Governmental Authority, (b) constitute a breach of, or default under (or an event which, with notice or lapse of time or both, would become a default under) or conflict with, or give rise to any right of termination, cancellation or acceleration of, any agreement, arrangement or instrument, whether written or oral, by which the Company, any of its subsidiaries or any of its assets are bound, (c) result in any encumbrance upon any of the Shares, other than restrictions on resale pursuant to securities Laws, or (d) violate or conflict with any of the provisions of the Organizational Documents or any subsidiary's organizational documents, except, in the case of subsections (a) and (b), as would not have or be reasonably likely to have a Material Adverse Effect.

4.7 No Governmental Authority or Third Party Consents. No consent, approval, authorization or other order of, or filing with, or notice to, any Governmental Authority or other Third Party is required to be obtained or made by the Company or its subsidiaries in connection with the authorization, execution and delivery by the Company and its subsidiaries of any of the Transaction Agreements, or with the authorization, issue and sale by the Company of the Shares, except (i) such filings as may be required to be made with the Securities and Exchange Commission (the "**SEC**") and with any state blue sky or securities regulatory authority, which filings shall be made in a timely manner in accordance with all applicable Laws, (ii) as required pursuant to the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended (the "**HSR Act**") and (iii) such filings as may be required to be made with the Accounting and Corporate Regulatory Authority of Singapore in connection with the allotment and issuance by the Company of the Shares.

4.8 Valid Issuance of Shares. When issued, sold and delivered at the Closing in accordance with the terms hereof for the Aggregate Purchase Price, the Shares shall be validly issued, fully paid and nonassessable, free from any liens, encumbrances or restrictions on transfer, including preemptive rights, rights of first refusal or other similar rights, other than as arising pursuant to the Investor Agreement, as a result of any action by the Investor or under federal or state securities Laws.

4.9 Litigation. Except as set forth in the Company SEC Documents filed prior to the date of this Agreement, there is no action, suit, proceeding or investigation pending (of which the Company or its subsidiaries have received notice or otherwise have knowledge) or, to the Company's knowledge, threatened against the Company or its subsidiaries or which the Company or its subsidiaries intends to initiate which has had or is reasonably likely to have a Material Adverse Effect.

4.10 Licenses and Other Rights; Compliance with Laws. The Company and its subsidiaries (as applicable) have all franchises, permits, licenses and other rights and privileges ("**Permits**") necessary to permit them to own their properties and to conduct their business as presently conducted and are in compliance thereunder, except where the failure to be in compliance does not and would not have or be reasonably likely to have a Material Adverse Effect. To the Company's knowledge, neither the Company nor its subsidiaries have not taken any action that would interfere with the Company's or its subsidiaries' ability to renew all such Permit(s), except where the failure to renew such Permit(s) would not have or be reasonably likely to have a Material Adverse Effect. The Company and its subsidiaries are and have been in compliance with all Laws applicable to their business, properties and assets, and to the products and services sold by them, except where the failure to be in compliance does not and would not have or be reasonably likely to have a Material Adverse Effect.

4.11 Company SEC Documents; Liabilities; Nasdaq Stock Market.

(a) Since December 31, 2015, the Company has timely filed all required reports, schedules, forms, statements and other documents (including exhibits and all other information incorporated therein), and any required amendments to any of the foregoing, with the SEC (the "**Company SEC Documents**"). As of their respective filing dates, each of the Company SEC Documents complied in all material respects with the requirements of the Securities Act of 1933, as amended (the "**Securities Act**"), and the Securities Exchange Act of 1934, as amended (the "**Exchange Act**"), and the rules and regulations of the SEC promulgated thereunder applicable to such Company SEC Documents, and no Company SEC Documents when filed, declared effective or mailed, as applicable, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading.

(b) As of the date of this Agreement, other than as has been disclosed to the Investor, there are no outstanding or unresolved comments in comment letters received from the SEC or its staff.

(c) The financial statements of the Company included in its Annual Report on Form 10-K for the fiscal year ended December 31, 2016 and in its quarterly reports on Form 10-Q for the quarterly periods ended September 30, 2017, June 30, 2017, and March 31, 2017 comply as to form in all material respects with applicable accounting requirements and the published rules and regulations of the SEC with respect thereto, have been prepared in accordance with U.S. generally accepted accounting principles applied on a consistent basis during the periods involved (except as may be indicated in the notes thereto) and fairly present in all material respects the financial position of the Company as of the dates thereof and the results of its operations and cash flows for the periods then ended. Except (i) as set forth in the Company SEC Documents or (ii) for liabilities incurred in the ordinary course of business consistent with past practice since September 30, 2017, the Company has no liabilities, whether absolute or accrued, contingent or otherwise, other than those that would not, individually or in the aggregate, have or be reasonably likely to have a Material Adverse Effect.

(d) As of the date of this Agreement, the Ordinary Shares are listed on The Nasdaq Global Market, and the Company has taken no action designed to, or which to its knowledge is likely to have the effect of, terminating the registration of the Ordinary Shares under the Exchange Act or delisting the Ordinary Shares from The Nasdaq Global Market. As of the date of this Agreement, the Company has not received any notification that, and has no knowledge that, the SEC or The Nasdaq Stock Market LLC is contemplating terminating such listing or registration.

4.12 Absence of Certain Changes.

(a) Since December 31, 2016, there has not occurred any event that has caused or would reasonably be expected to cause a Material Adverse Effect.

(b) Except as set forth in the Company SEC Documents filed prior to the date of this Agreement, since December 31, 2016, the Company has not (i) declared or paid any dividends, or authorized or made any distribution upon or with respect to any class or series of its capital stock, or (ii) sold, exchanged or otherwise disposed of any of its material assets or rights.

(c) Since December 31, 2016, the Company has not admitted in writing its inability to pay its debts generally as they become due, filed or consented to the filing against it of a petition in bankruptcy or a petition to take advantage of any insolvency act, made an assignment for the benefit of creditors, consented to the appointment of a receiver for itself or for the whole or any substantial part of its property, or had a petition in bankruptcy filed against it, been adjudicated a bankrupt, or filed a petition or answer seeking reorganization or arrangement under the federal bankruptcy Laws or any other Laws of the United States or any other jurisdiction.

4.13 Intellectual Property.

(a) The Intellectual Property that is owned by the Company is owned free from any material liens or restrictions. All of the Company's material Intellectual Property Licenses are in full force and effect in accordance with their terms, are free of any material liens

or restrictions, and neither the Company nor to the Company's knowledge any other party thereto, is in material breach of any such material Intellectual Property License, and no event has occurred that with notice or lapse of time or both would constitute such a material breach thereunder or would result in the termination thereof or would cause or permit the acceleration or other change of any material right or obligation of the loss of any material benefit thereunder by the Company, except, in each case, (i) for any such failure to be in full force and effect, any such lien or restriction, and any such material breach that would not reasonably be expected to have a Material Adverse Effect, or (ii) as set forth in any such Intellectual Property License. Except as set forth in the Company SEC Documents, there is no legal claim or demand of any Person pertaining to, or any proceeding which is pending (of which the Company has received notice or otherwise has knowledge) or, to the knowledge of the Company, threatened, (i) challenging the right of the Company in respect of any Company Intellectual Property, or (ii) that claims that any default exists under any Intellectual Property License, except, in each case ((i) and (ii)), where such claim, demand or proceeding would not have or reasonably be expected to have a Material Adverse Effect.

(b) The Company or one of its subsidiaries owns, free and clear of any lien or encumbrance, or has a valid license to, or has an enforceable right to use, as it is used or held for use, all U.S. and non-U.S. Intellectual Property rights reasonably necessary for the conduct of the Company's business ("**Company Intellectual Property**"), the absence of which would not have or reasonably be expected to have a Material Adverse Effect. The Company and its subsidiaries have taken reasonable measures to protect such Company Intellectual Property, consistent with prudent commercial practices in the biotechnology industry, except where failure to take such measures would not have or reasonably be expected to have a Material Adverse Effect.

4.14 Tax Returns, Payments and Elections. The Company has filed all tax returns and reports as required, and within the time prescribed, by applicable Law and has paid or made provision for the payment of all accrued and unpaid taxes to which the Company is subject and which are not currently due and payable, except in each case where any failure would not have a Material Adverse Effect.

4.15 Offering. Subject to the accuracy of the Investor's representations set forth in Sections 5.5, 5.6, 5.7, 5.9 and 5.10, the offer, sale and issuance of the Shares to be issued in conformity with the terms of this Agreement constitute transactions which are exempt from the registration requirements of the Securities Act and from all applicable state registration or qualification requirements. Neither the Company, its subsidiaries nor any Person acting on behalf of the Company or its subsidiaries will take any action that would cause the loss of such exemption.

4.16 No Integration. The Company and its subsidiaries have not, directly or through any agent, sold, offered for sale, solicited offers to buy or otherwise negotiated in respect of, any security (as defined in the Securities Act) which is or will be integrated with the Shares sold pursuant to this Agreement in a manner that would require the registration of the Shares under the Securities Act.

4.17 Brokers' or Finders' Fees. No broker, finder, investment banker or other Person is entitled to any brokerage, finder's or other fee or commission from the Company in connection with the transactions contemplated by the Transaction Agreements.

4.18 Not Investment Company. The Company is not, and solely after receipt of the Aggregate Purchase Price, will not be, an "investment company" as defined in the Investment Company Act of 1940, as amended.

5. Representations and Warranties of the Investor. The Investor hereby represents and warrants to the Company that:

5.1 Organization; Good Standing. The Investor is a corporation duly organized, validly existing and in good standing under the laws of Japan. The Investor has or will have all requisite power and authority to enter into the Transaction Agreements, to purchase the Shares and to perform its obligations under and to carry out the other transactions contemplated by the Transaction Agreements.

5.2 Authorization. All requisite action on the part of the Investor and its directors and shareholders, required by applicable Law for the authorization, execution and delivery by the Investor of the Transaction Agreements and the performance of all of its obligations thereunder, including the subscription for and purchase of the Shares, has been taken. This Agreement and the Collaboration Agreement have been, and upon the execution and delivery of the Investor Agreement at the Closing by the Investor, the Investor Agreement will be, duly executed and delivered by the Investor and upon the due execution and delivery thereof by the Company, will constitute valid and legally binding obligations of the Investor, enforceable against the Investor in accordance with their respective terms (except as such enforceability may be limited by (a) applicable bankruptcy, insolvency, reorganization, moratorium or other Laws of general application relating to or affecting enforcement of creditors' rights and (b) rules of Law governing specific performance, injunctive relief or other equitable remedies and limitations of public policy).

5.3 No Conflicts. The execution, delivery and performance of the Transaction Agreements and compliance with the provisions hereof and thereof by the Investor do not and shall not: (a) violate any provision of applicable Law or any ruling, writ, injunction, order, permit, judgment or decree of any Governmental Authority, (b) constitute a breach of, or default under (or an event which, with notice or lapse of time or both, would become a default under) or conflict with, or give rise to any right of termination, cancellation or acceleration of, any agreement, arrangement or instrument, whether written or oral, by which the Investor or any of its assets, are bound, or (c) violate or conflict with any of the provisions of the Investor's organizational documents (including any articles or memoranda of organization or association, charter, bylaws or similar documents), except, in the case of subsections (a) or (b), as would not materially impair or adversely affect the ability of the Investor to consummate the Transaction and perform its obligations under the Transaction Agreements.

5.4 No Governmental Authority or Third Party Consents. No consent, approval, authorization or other order of any Governmental Authority or other Third Party is required to be obtained by the Investor in connection with the authorization, execution and

delivery of any of the Transaction Agreements or with the subscription for and purchase of the Shares, except as required pursuant to the HSR Act.

5.5 Purchase Entirely for Own Account. The Shares shall be acquired for investment for the Investor's own account, not as a nominee or agent, and not with a view to the resale or distribution of any part thereof, and the Investor has no present intention of selling, granting any participation or otherwise distributing the Shares. The Investor does not have and will not have as of the Closing any contract, undertaking, agreement or arrangement with any Person to sell, transfer or grant participation to a Person any of the Shares.

5.6 Disclosure of Information. The Investor has had the opportunity to review the Company SEC Documents and has received all the information from the Company and its management that the Investor considers necessary or appropriate for deciding whether to purchase the Shares hereunder. The Investor further represents that it has had an opportunity to ask questions and receive answers from the Company regarding the Company, its financial condition, results of operations and prospects and the terms and conditions of the offering of the Shares sufficient to enable it to evaluate its investment.

5.7 Investment Experience and Accredited Investor Status. The Investor is an "accredited investor" (as defined in Regulation D under the Securities Act). The Investor has such knowledge and experience in financial or business matters that it is capable of evaluating the merits and risks of the investment in the Shares to be purchased hereunder.

5.8 Acquiring Person. As of the date of this Agreement and immediately prior to the Closing, neither the Investor nor any of its Affiliates beneficially owns, or will beneficially own (as determined pursuant to Rule 13d-3 under the Exchange Act without regard for the number of days in which a Person has the right to acquire such beneficial ownership, and without regard to the Investor's rights under this Agreement), any securities of the Company, except for securities that may be owned by an employee benefit plan of Investor or any mutual fund or similar investment entity in which Investor and its Affiliates own less than 5% in the aggregate, and over which neither the Investor nor its Affiliates exercise direct management or investment control.

5.9 Restricted Securities. The Investor understands that the Shares, when issued, shall be "restricted securities" under the federal securities Laws inasmuch as they are being acquired from the Company in a transaction not involving a public offering and that under such Laws the Shares may be resold without registration under the Securities Act only in certain limited circumstances. The Investor represents that it is familiar with Rule 144 of the Securities Act, as presently in effect.

5.10 Legends. The Investor understands that the Shares in book-entry form shall be subject to the following legends:

(a) "These securities have not been registered under the Securities Act of 1933. They may not be sold, offered for sale, pledged or hypothecated in the absence of a registration statement in effect with respect to the securities under the Securities Act or an opinion of counsel (which counsel shall be reasonably satisfactory to Wave Life Sciences Ltd.)

that such registration is not required or unless sold pursuant to Rule 144 of the Securities Act."; and

(b) "These securities are subject to and shall be transferable only upon the terms and conditions of an Investor Agreement by and between Wave Life Sciences Ltd. and Takeda Pharmaceutical Company Limited, a copy of which is on file with the Secretary of Wave Life Sciences Ltd."

5.11 Financial Assurances. As of the date hereof and as of the Closing Date, the Investor has and will have access to cash in an amount sufficient to pay to the Company the Aggregate Purchase Price.

6. Investor's Conditions to Closing. The Investor's obligation to purchase the Shares at the Closing is subject to the fulfillment as of the Closing of the following conditions (unless waived in writing by the Investor):

6.1 Representations and Warranties. The representations and warranties made by the Company in Section 4 hereof shall be true and correct as of the date of this Agreement and as of the Closing Date as though made on and as of the Closing Date, except to the extent such representations and warranties are specifically made as of a particular date, in which case such representations and warranties shall be true and correct as of such date; provided, however, that for purposes of this Section 6.1, all such representations and warranties of the Company (other than Sections 4.1(a), 4.2, 4.3, 4.4, 4.5(a), 4.6(d), 4.8, 4.12(c) and 4.17 of this Agreement) shall be deemed to be true and correct for purposes of this Section 6.1 unless the failure or failures of such representations and warranties to be so true and correct, without regard to any "material," "materiality" or "Material Adverse Effect" qualifiers set forth therein, individually or in the aggregate, has had or would reasonably be expected to have a Material Adverse Effect.

6.2 Covenants. All covenants and agreements contained in this Agreement to be performed or complied with by the Company on or prior to the Closing Date shall have been performed or complied with in all material respects.

6.3 Investor Agreement. The Company shall have duly executed and delivered to the Investor, pursuant to Section 3.2(a) of this Agreement, the Investor Agreement.

6.4 Collaboration Agreement. The Company shall have duly executed and delivered to the Investor the Collaboration Agreement, and there shall have been no termination of the Collaboration Agreement that, as of the Closing, has been delivered or is effective.

6.5 No Material Adverse Effect. From and after the date of this Agreement until the Closing Date, there shall have occurred no event that has caused or would reasonably be expected to cause a Material Adverse Effect.

7. Company's Conditions to Closing. The Company's obligation to issue and sell the Shares at the Closing is subject to the fulfillment as of the Closing of the following conditions (unless waived in writing by the Company):

7.1 Representations and Warranties. The representations and warranties made by the Investor in Section 5 hereof shall be true and correct as of the date of this Agreement and as of the Closing Date as though made on and as of the Closing Date, except to the extent such representations and warranties are specifically made as of a particular date, in which case such representations and warranties shall be true and correct as of such date.

7.2 Covenants. All covenants and agreements contained in this Agreement to be performed or complied with by the Investor on or prior to the Closing Date shall have been performed or complied with in all material respects.

7.3 Investor Agreement. The Investor shall have duly executed and delivered to the Company, pursuant to Section 3.2(b) of this Agreement, the Investor Agreement.

7.4 Collaboration Agreement. The Investor shall have duly executed and delivered to the Company the Collaboration Agreement, and there shall have been no termination of the Collaboration Agreement that, as of the Closing, has been delivered or is effective.

8. Mutual Conditions to Closing. The obligations of the Investor and the Company to consummate the Closing are subject to the fulfillment as of the Closing Date of the following conditions:

8.1 HSR Act and Other Qualifications. The filings required under the HSR Act in connection with the Transaction Agreements shall have been made and the required waiting period shall have expired or been terminated as of the Closing Date, and all other authorizations, consents, waivers, permits, approvals, qualifications and registrations to be obtained or effected with any Governmental Authority, including, without limitation, necessary blue sky permits and qualifications required by any state for the offer and sale to the Investor of the Shares, shall have been obtained and shall be in effect as of the Closing Date.

8.2 Absence of Litigation. There shall be no action, suit, proceeding or investigation by a Governmental Authority pending or currently threatened in writing against the Company or the Investor that questions the validity of any of the Transaction Agreements, the right of the Company or the Investor to enter into any Transaction Agreement or to consummate the transactions contemplated hereby or thereby or which, if determined adversely, would impose substantial monetary damages on the Company or the Investor as a result of the consummation of the transactions contemplated by any Transaction Agreement.

8.3 No Prohibition; Market Listing. (a) No provision of any applicable Law and no judgment, injunction (preliminary or permanent), order or decree that prohibits, makes illegal or enjoins the consummation of the Transaction shall be in effect; and (b) the Ordinary Shares shall be eligible for listing on The Nasdaq Global Market.

9. Termination.

9.1 Ability to Terminate. This Agreement may be terminated at any time prior to the Closing by:

(a) mutual written consent of the Company and the Investor;

(b) either the Company or the Investor, upon written notice to the other after one hundred and eighty (180) days from the date hereof (the "**Termination Date**"), if the Transaction shall not have been consummated by the Termination Date; provided, however, that the right to terminate this Agreement under this Section 9.1(b) shall not be available to any party whose failure to fulfill any obligation under this Agreement has been the cause of, or resulted in, the failure to consummate the transactions contemplated hereby prior to the Termination Date;

(c) either the Company or the Investor, upon written notice to the other, if any of the mutual conditions to the Closing set forth in Section 8 shall have become incapable of fulfillment by the Termination Date and shall not have been waived in writing by the other party; provided, however, that the right to terminate this Agreement under this Section 9.1(c) shall not be available to any party whose failure to fulfill any obligation under this Agreement has been the cause of, or resulted in, the failure to consummate the transactions contemplated hereby prior to the Termination Date;

(d) the Company, if (i) any of the representations and warranties of the Investor contained in Section 5 of this Agreement shall fail to be true and correct or (ii) there shall be a breach by the Investor of any covenant of the Investor in this Agreement that, in either case, (A) would result in the failure of a condition set forth in Section 6 or 8, and (B) which is not curable or, if curable, is not cured on or prior to the twentieth (20th) day after written notice thereof is given the Company to the Investor;

(e) the Investor, if (i) any of the representations and warranties of the Company contained in Section 4 of this Agreement shall fail to be true and correct or (ii) there shall be a breach by the Company of any covenant of the Company in this Agreement that, in either case, (A) would result in the failure of a condition set forth in Section 7 or 8, and (B) which is not curable or, if curable, is not cured on or prior to the twentieth (20th) day after written notice thereof is given by the Investor to the Company.

9.2 Effect of Termination. In the event of the termination of this Agreement pursuant to Section 9.1 hereof, (a) this Agreement (except for this Section 9.2 and Section 11 hereof (other than Section 11.13), and any definitions set forth in this Agreement and used in such sections) shall forthwith become void and have no effect, without any liability on the part of any party hereto or its Affiliates, and (b) all filings, applications and other submissions made pursuant to this Agreement, to the extent practicable, shall be withdrawn from the agency or other Person to which they were made or appropriately amended to reflect the termination of the transactions contemplated hereby; provided, however, that nothing contained in this Section 9.2 shall relieve any party from liability for fraud or any intentional or willful breach of this Agreement.

10. Additional Covenants and Agreements.

10.1 Market Listing. From the date hereof through the Closing Date, the Company shall use all reasonable efforts to (a) maintain the listing and trading of the Ordinary Shares on The Nasdaq Global Market and (b) effect the listing of the Shares on The Nasdaq Global Market.

10.2 Assistance and Cooperation. Prior to the Closing, upon the terms and subject to the conditions set forth in this Agreement, each of the parties agrees to use all reasonable efforts to take, or cause to be taken, all actions and to do, or cause to be done, and to assist and cooperate with the other party in doing, all things necessary, proper or advisable to consummate and make effective, in the most expeditious manner practicable, the transactions contemplated by this Agreement, including using all reasonable efforts to accomplish the following: (a) taking all reasonable acts necessary to cause the conditions precedent set forth in Sections 6, 7 and 8 to be satisfied; (b) obtaining all necessary actions or non-actions, waivers, consents, approvals, orders and authorizations from Governmental Authorities and the making of all necessary registrations, declarations and filings (including registrations, declarations and filings with Governmental Authorities, if any) and taking all reasonable steps as may be necessary to avoid any suit, claim, action, investigation or proceeding by any Governmental Authority; (c) taking all reasonable steps to obtain all necessary consents, approvals or waivers from Third Parties; and (d) defending any suits, claims, actions, investigations or proceedings, whether judicial or administrative, challenging this Agreement or the consummation of the transactions contemplated hereby, including seeking to have any stay or temporary restraining order entered by any court or other Governmental Authority vacated or reversed. In addition, each of the Company and the Investor will promptly take any and all steps necessary to obtain any consent or to vacate or lift any order, writ, judgment, injunction, decree, stipulation, determination or award entered by or with any Governmental Authority relating to antitrust matters that would have the effect of making any of the transactions contemplated by this Agreement illegal or otherwise prohibiting or materially delaying their consummation.

10.3 Effect of Waiver of Condition to Closing. In the event that, as of the Closing, the Investor waives the condition regarding a Material Adverse Effect set forth in Section 6.5 of this Agreement, the Investor shall be deemed to have waived any right of recourse against the Company for, and agreed not to sue the Company in respect of, any and all events or inaccuracies in any representations or warranties of the Company (a) that, as of the Closing, have caused or would reasonably be expected to cause such Material Adverse Effect and (b) of which the Investor had notice in writing from the Company immediately prior to the Closing.

10.4 Share Legend Removal. The legend set forth in Section 5.10 hereof shall be removed from any certificate evidencing the Shares (or if the Shares are held in book-entry form, any restrictions on transfer noted with respect thereto shall be removed) and the Company shall, or shall cause its transfer agent to, issue, no later than five (5) Business Days from receipt of a request from the Investor pursuant to this Section 10.4 following the expiration of the Restricted Period (as defined in the Investor Agreement) or such earlier date on which the restrictions on dispositions of the Shares terminates in accordance with Section 6.3 of the Investor Agreement, a certificate or certificates evidencing all or a portion of the Shares (if any), as requested by the Investor, without such legend if such legend removal is in compliance with

Sections 4 and 5 of the Investor Agreement and: (i) such securities have been resold under an effective registration statement under the Securities Act, (ii) such securities have been or will be transferred in compliance with Rule 144 under the Securities Act, (iii) such securities are eligible for resale pursuant to Rule 144(b)(1)(i) under the Securities Act or (iv) the Investor shall have provided the Company with an opinion of counsel, reasonably satisfactory to the Company, stating that such securities may lawfully be transferred without registration under the Securities Act.

11. Miscellaneous.

11.1 Governing Law; Jurisdiction. This Agreement shall be governed by, and construed in accordance with, the Laws of the State of New York without regard to the conflict of laws principles thereof that would require the application of the Law of any other jurisdiction. The parties irrevocably and unconditionally submit to the exclusive jurisdiction of the United States District Court for the Southern District of New York solely and specifically for the purposes of any action or proceeding arising out of or in connection with this Agreement.

11.2 Waiver. Waiver by a party of a breach hereunder by the other party shall not be construed as a waiver of any subsequent breach of the same or any other provision. No delay or omission by a party in exercising or availing itself of any right, power or privilege hereunder shall preclude the later exercise of any such right, power or privilege by such party. No waiver shall be effective unless made in writing with specific reference to the relevant provision(s) of this Agreement and signed by a duly authorized representative of the party granting the waiver.

11.3 Notices. All notices, instructions and other communications hereunder or in connection herewith shall be in writing, shall be sent to the address of the relevant party set forth on Exhibit C attached hereto and shall be (a) delivered personally, (b) sent by registered or certified mail, return receipt requested, postage prepaid, (c) sent via a reputable nationwide overnight courier service or (d) sent by facsimile transmission, with a confirmation copy to be sent by registered or certified mail, return receipt requested, postage prepaid. Any such notice, instruction or communication shall be deemed to have been delivered upon receipt if delivered by hand, three (3) Business Days after it is sent by registered or certified mail, return receipt requested, postage prepaid, one (1) Business Day after it is sent via a reputable nationwide overnight courier service or when transmitted with electronic confirmation of receipt, if transmitted by facsimile (if such transmission is made during regular business hours of the recipient on a Business Day; or otherwise, on the next Business Day following such transmission). Either party may change its address by giving notice to the other party in the manner provided above.

11.4 Entire Agreement. This Agreement and the Investor Agreement (once executed), contain the entire agreement among the parties with respect to the subject matter hereof and thereof and supersede all prior and contemporaneous arrangements or understandings, whether written or oral, with respect hereto and thereto.

11.5 Amendments. No provision in this Agreement shall be supplemented, deleted or amended except in a writing executed by an authorized representative of each of the Investor and the Company.

11.6 Headings; Nouns and Pronouns; Section References. Headings in this Agreement are for convenience of reference only and shall not be considered in construing this Agreement. Whenever the context may require, any pronouns used herein shall include the corresponding masculine, feminine or neuter forms, and the singular form of names and pronouns shall include the plural and vice-versa. References in this Agreement to a section or subsection shall be deemed to refer to a section or subsection of this Agreement unless otherwise expressly stated.

11.7 Severability. If, under applicable Laws, any provision hereof is invalid or unenforceable, or otherwise directly or indirectly affects the validity of any other material provision(s) of this Agreement in any jurisdiction ("**Modified Clause**"), then, it is mutually agreed that this Agreement shall endure and that the Modified Clause shall be enforced in such jurisdiction to the maximum extent permitted under applicable Laws in such jurisdiction; provided that the parties shall consult and use all reasonable efforts to agree upon, and hereby consent to, any valid and enforceable modification of this Agreement as may be necessary to avoid any unjust enrichment of either party and to match the intent of this Agreement as closely as possible, including the economic benefits and rights contemplated herein.

11.8 Assignment. Except for an assignment by the Investor of this Agreement or any rights hereunder to an Affiliate (which assignment shall not relieve the Investor of any obligation hereunder), neither this Agreement nor any of the rights or obligations hereunder may be assigned by either the Investor or the Company without (a) the prior written consent of the Company in the case of any assignment by the Investor or (b) the prior written consent of the Investor in the case of an assignment by the Company.

11.9 Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and permitted assigns.

11.10 Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed an original but which together shall constitute one and the same instrument.

11.11 Third Party Beneficiaries. None of the provisions of this Agreement shall be for the benefit of or enforceable by any Third Party, including any creditor of any party hereto. No Third Party shall obtain any right under any provision of this Agreement or shall by reason of any such provision make any claim in respect of any debt, liability or obligation (or otherwise) against any party hereto.

11.12 No Strict Construction. This Agreement has been prepared jointly and will not be construed against either party.

11.13 Survival of Warranties. The representations and warranties of the Company and the Investor contained in this Agreement shall survive the Closing for twelve (12) months, except for (a) the representations and warranties set forth in Sections 4.1, 4.2, 4.4,

4.5(a), 4.6(d), 4.8, 4.12, 4.15, 4.16, 4.17, 5.1, 5.2, 5.5, 5.7, 5.8, 5.9 and 5.10, which shall survive the Closing and (b) the representation and warranty of the Investor in Section 5.11, which shall not survive the Closing. The parties hereby acknowledge and agree that the rights of the parties hereunder are special, unique and of extraordinary character, and that if any party refuses or otherwise fails to act, or to cause its Affiliates to act, in accordance with the provisions of this Agreement, such refusal or failure would result in irreparable injury to the Company or the Investor as the case may be, the exact amount of which would be difficult to ascertain or estimate and the remedies at law for which would not be reasonable or adequate compensation. Accordingly, if any party refuses or otherwise fails to act, or to cause its Affiliates to act, in accordance with the provisions of this Agreement, then, in addition to any other remedy which may be available to any damaged party at law or in equity, such damaged party will be entitled to seek specific performance and injunctive relief, without posting bond or other security, and without the necessity of proving actual or threatened damages, which remedy such damaged party will be entitled to seek in any court of competent jurisdiction.

11.14 Remedies. The rights, powers and remedies of the parties under this Agreement are cumulative and not exclusive of any other right, power or remedy which such parties may have under any other agreement or Law. No single or partial assertion or exercise of any right, power or remedy of a party hereunder shall preclude any other or further assertion or exercise thereof.

11.15 Expenses. Each party shall pay its own fees and expenses in connection with the preparation, negotiation, execution and delivery of this Agreement and the Investor Agreement.

(*Signature Page Follows*)

IN WITNESS WHEREOF, the parties have executed and delivered this Agreement as of the date first above written.

WAVE LIFE SCIENCES LTD.

By: /s/ Paul B. Bolno
Name: Paul B. Bolno
Title: President and CEO

TAKEDA PHARMACEUTICAL COMPANY LIMITED

By: /s/ Fumihiko Sato
Name: Fumihiko Sato
Title: Head of Portfolio Strategic Relations

EXHIBIT A

FORM OF CROSS RECEIPT

CROSS RECEIPT

Wave Life Sciences Ltd. hereby acknowledges receipt from Takeda Pharmaceutical Company Limited on [__], 2018 of $59,999,992.40, representing the purchase price for 1,096,892 Ordinary Shares, no par value, of Wave Life Sciences Ltd., pursuant to that certain Share Purchase Agreement, dated as of February 19, 2018, by and between Takeda Pharmaceutical Company Limited and Wave Life Sciences Ltd.

WAVE LIFE SCIENCES LTD.

By: _____
Name:
Title:

Takeda Pharmaceutical Company Limited hereby acknowledges receipt from Wave Life Sciences Ltd. on [__], 2018 of 1,096,892 Ordinary Shares, no par value, of Wave Life Sciences Ltd., delivered pursuant to that certain Share Purchase Agreement, dated as of February 19, 2018, by and between Takeda Pharmaceutical Company Limited and Wave Life Sciences Ltd.

TAKEDA PHARMACEUTICAL COMPANY LIMITED

By: _____
Name:
Title:

EXHIBIT B

FORM OF INVESTOR AGREEMENT

EXHIBIT C

NOTICES

(a) If to the Investor:

Takeda Pharmaceuticals U.S.A., Inc.
One Takeda Parkway
Deerfield, IL 60015
Attention: General Counsel

with a copy to:

Ropes & Gray LLP
Prudential Tower
800 Boylston Street
Boston, MA 02199-3600
Attention: Steven Wilcox and Zachary Blume

(b) If to the Company:

Wave Life Sciences Ltd.
733 Concord Avenue
Cambridge, MA 02138
Attention: General Counsel

with a copy to:

Goodwin Procter LLP
100 Northern Avenue
Boston, MA 02210
Attention: Kingsley L. Taft, Esq.
Gregg L. Katz, Esq.

Exhibit 10.3

INVESTOR AGREEMENT

By and Between

TAKEDA PHARMACEUTICAL COMPANY LIMITED

AND

WAVE LIFE SCIENCES LTD.

Dated as of April 2, 2018

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INVESTOR AGREEMENT

THIS INVESTOR AGREEMENT (this "**Agreement**") is made as of April 2, 2018, by and among Takeda Pharmaceutical Company Limited, a company incorporated under the laws of Japan (the "**Investor**"), and Wave Life Sciences Ltd., a Singapore public limited company (the "**Company**").

WHEREAS, the Share Purchase Agreement, dated as of February 19, 2018, by and between the Investor and the Company (the "**Purchase Agreement**") provides for the issuance and sale by the Company to the Investor, and the purchase by the Investor, of 1,096,892 Ordinary Shares (the "**Purchased Shares**"); and

WHEREAS, as a condition to consummating the transactions contemplated by the Purchase Agreement, the Investor and the Company have agreed upon certain rights and restrictions as set forth herein with respect to the Purchased Shares and other securities of the Company beneficially owned by the Investor and its Affiliates, and it is a condition to the closing under the Purchase Agreement that this Agreement be executed and delivered by the Investor and the Company.

NOW, THEREFORE, in consideration of the premises and mutual agreements hereinafter set forth, and for other valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

1. Definitions. As used in this Agreement, the following terms shall have the following meanings:

(a) "**Acquisition Proposal**" shall have the meaning set forth in Section 3.1(c).

(b) "**Affiliate**" shall mean, with respect to any Person, another Person which controls, is controlled by or is under common control with such Person. A Person shall be deemed to "**control**" another Person if any of the following conditions is met: (i) in the case of corporate entities, direct or indirect ownership of more than fifty percent (50%) of the stock or shares having the right to vote for the election of directors or otherwise having the power to control or direct the affairs of such Person; and (ii) in the case of non-corporate entities, direct or indirect ownership of more than fifty percent (50%) of the equity interest or the power to direct the management and policies of such non-corporate entities. For the purposes of this Agreement, in no event shall the Investor or any of its Affiliates be deemed Affiliates of the Company or any of its Affiliates, nor shall the Company or any of its Affiliates be deemed Affiliates of the Investor or any of its Affiliates.

(c) "**Affiliate Irrevocable Proxy**" shall have the meaning set forth in Section 5.1(c).

(d) "**Agreement**" shall have the meaning set forth in the Preamble, including all Exhibits attached hereto.

(e) "**beneficial owner**," "**beneficially owns**," "**beneficial ownership**" and terms of similar import used in this Agreement shall, with respect to a Person, have the meaning set forth in Rule 13d-3 under the Exchange Act (i) assuming the full conversion into, and exercise and exchange for, Ordinary Shares of all Ordinary Share Equivalents beneficially owned by such Person and (ii) determined without regard for the number of days in which such Person has the right to acquire such beneficial ownership.

(f) "**Business Day**" shall mean a calendar day other than a Saturday, Sunday, or a bank or other public holiday in Massachusetts or New York in the United States or in Tokyo in Japan.

(g) "**Change of Control**" shall mean, with respect to the Company, any of the following events: (i) any Person becomes the beneficial owner (except that a Person shall be deemed to have beneficial ownership of all Ordinary Shares that any such Person has the right to acquire, whether such right which may be exercised immediately or only after the passage of time), directly or indirectly, of a majority of the total voting power represented by all Then Outstanding Ordinary Shares; (ii) the Company consolidates with or merges into another corporation or entity, or any corporation or entity consolidates with or merges into the Company, other than (A) a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior to such merger or consolidation continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or any parent thereof) a majority of the combined voting power of the voting securities of the Company or such surviving entity or any parent thereof outstanding immediately after such merger or consolidation, or (B) a merger or consolidation effected to implement a recapitalization of the Company (or similar transaction) in which no Person becomes the beneficial owner, directly or indirectly, of a majority of the total voting power of all Then Outstanding Ordinary Shares or (iii) the Company conveys, transfers or leases all or substantially all of its assets to any Person other than a wholly owned Affiliate of the Company.

(h) "**Collaboration Agreement**" shall mean the Collaboration and License Agreement between the Company and the Investor, dated as of February 19, 2018.

(i) "**Company**" shall have the meaning set forth in the Preamble to this Agreement.

(j) "**Controlling Person**" shall have the meaning set forth in Section 2.7(a).

(k) "**Damages**" shall have the meaning set forth in Section 2.7(a).

(l) "**Demand Registration**" shall have the meaning set forth in Section 2.1(a).

(m) "**Disposition**" or "**Dispose of**" shall mean any (i) offer, pledge, sale, contract to sell, sale of any option or contract to purchase, purchase of any option or contract to sell, grant of any option, right or warrant for the sale of, or other disposition of or transfer of any Ordinary Shares, or any Ordinary Share Equivalents, including, without limitation, any "short sale" or similar arrangement, or (ii) swap or any other agreement or any

transaction that transfers, in whole or in part, directly or indirectly, the economic consequence of ownership of Ordinary Shares, whether any such swap or transaction is to be settled by delivery of securities, in cash or otherwise.

(n) "**Exchange Act**" shall mean the Securities Exchange Act of 1934, as amended, and the rules and regulations of the SEC promulgated thereunder.

(o) "**Extraordinary Matter**" shall have the meaning set forth in Section 5.2.

(p) "**Filing Date**" shall mean (i) with respect to any Registration Statement to be filed on Form S-1 (or any applicable successor form), sixty (60) days after receipt by the Company of a Demand Request for such Registration Statement and (ii) with respect to any Registration Statement to be filed on Form S-3 (or any applicable successor form), forty-five (45) days after receipt by the Company of a Demand Request for such Registration Statement.

(q) "**Governmental Authority**" shall mean any court, agency, authority, department, regulatory body or other instrumentality of any government or country or of any national, federal, state, provincial, regional, county, city or other political subdivision of any such government or country or any supranational organization of which any such country is a member.

(r) "**Holder**" shall have the meaning set forth in Section 2.1(a).

(s) "**Holders' Counsel**" shall have the meaning set forth in Section 2.3.

(t) "**Indemnified Party**" shall have the meaning set forth in Section 2.7(c).

(u) "**Indemnifying Party**" shall have the meaning set forth in Section 2.7(c).

(v) "**Interference**" shall have the meaning set forth in Section 2.1(d).

(w) "**Investor**" shall have the meaning set forth in the Preamble to this Agreement.

(x) "**Irrevocable Proxy**" shall have the meaning set forth in Section 5.1(b).

(y) "**Law**" or "**Laws**" shall mean all laws, statutes, rules, regulations, orders, judgments, injunctions and/or ordinances of any Governmental Authority.

(z) "**Modified Clause**" shall have the meaning set forth in Section 7.7.

(aa) "**Offeror**" shall have the meaning set forth in Section 3.1(c).

(bb) "**Ordinary Share Equivalents**" shall mean any options, warrants or other securities or rights convertible into or exercisable or exchangeable for, whether directly or following conversion into or exercise or exchange for other options, warrants or other securities or rights, Ordinary Shares.

(cc) "**Ordinary Shares**" means the ordinary shares, fully-paid up, no par value, of the Company.

(dd) "**Permitted Transferee**" shall mean a controlled Affiliate of the Investor that is wholly owned, directly or indirectly, by the Investor; it being understood that for purposes of this definition "wholly owned" shall mean an Affiliate in which the Investor owns, directly or indirectly, at least ninety-nine percent (99%) of the outstanding capital stock of such Affiliate; provided, however, that no such Person shall be deemed a Permitted Transferee for any purpose under this Agreement unless: (a) the Investor shall have, within five (5) days prior to such transfer, furnished to the Company written notice of the name and address of such Permitted Transferee, details of its status as a Permitted Transferee and details of the Then Outstanding Ordinary Shares and/or Ordinary Share Equivalents to be transferred, (b) the Permitted Transferee, prior to or simultaneously with such transfer, shall have agreed in writing to be subject to and bound by all restrictions and obligations set forth in this Agreement as though it were the Investor hereunder, and (c) the Investor acknowledges that it continues to be bound by all restrictions and obligations set forth in this Agreement.

(ee) "**Person**" shall mean any individual, partnership, firm, corporation, limited liability company, association, trust, unincorporated organization, government or any department or agency thereof or other entity, as well as any syndicate or group that would be deemed to be a Person under Section 13(d)(3) of the Exchange Act.

(ff) "**Piggyback Registration**" shall have the meaning set forth in Section 2.2(a).

(gg) "**Pfizer Holders**" shall have the meaning set forth in Section 2.1(c).

(hh) "**Prior Rights Holders**" shall have the meaning set forth in Section 2.1(c).

(ii) "**Prospectus**" shall mean the prospectus forming a part of any Registration Statement, as supplemented by any and all prospectus supplements and as amended by any and all amendments (including post-effective amendments) and including all material incorporated by reference or explicitly deemed to be incorporated by reference in such prospectus.

(jj) "**Purchase Agreement**" shall have the meaning set forth in the Recitals to this Agreement, and shall include all Exhibits attached thereto.

(kk) "**Purchased Shares**" shall have the meaning set forth in the Recitals to this Agreement, and shall be adjusted for (i) any stock split, stock dividend, share exchange, merger, consolidation or similar recapitalization and (ii) any Ordinary Shares issued as (or issuable upon the exercise of any warrant, right or other security that is issued as) a dividend or other distribution with respect to, or in exchange or in replacement of, the Purchased Shares.

(ll) "**registers**," "**registered**," and "**registration**" refer to a registration effected by preparing and filing a Registration Statement or similar document in compliance with the Securities Act, and the declaration or ordering of effectiveness of such Registration Statement or document by the SEC.

(mm) "**Registrable Securities**" shall mean (i) the Purchased Shares, together with any Ordinary Shares issued in respect thereof as a result of any stock split, stock dividend, share exchange, merger, consolidation or similar recapitalization and (ii) any Ordinary Shares issued as (or issuable upon the exercise of any warrant, right or other security that is issued as) a dividend or other distribution with respect to, or in exchange or in replacement of, the Ordinary Shares described in clause (i) of this definition, excluding in all cases, however, (A) any Registrable Securities if and after they have been transferred to a Permitted Transferee in a transaction in connection with which registration rights granted hereunder are not assigned or (B) any Registrable Securities sold to or through a broker or dealer or underwriter in a public distribution or a public securities transaction.

(nn) "**Registration Expenses**" shall have the meaning set forth in Section 2.3.

(oo) "**Registration Statement**" shall mean any registration statement of the Company under the Securities Act that covers any of the Registrable Securities pursuant to the provisions of this Agreement, including the related Prospectus, all amendments and supplements to such registration statement (including post-effective amendments), and all exhibits and all materials incorporated by reference or explicitly deemed to be incorporated by reference in such Registration Statement.

(pp) "**Restricted Term**" shall have the meaning set forth in Section 3.1.

(qq) "**SEC**" shall mean the United States Securities and Exchange Commission.

(rr) "**Securities Act**" shall mean the Securities Act of 1933, as amended, and the rules and regulations of the SEC promulgated thereunder.

(ss) "**Standstill Limit**" shall mean nine and ninety nine hundredths percent (9.99%) of the Then Outstanding Ordinary Shares.

(tt) "**Standstill Parties**" shall have the meaning set forth in Section 3.1.

(uu) "**Suspension Notice**" shall have the meaning set forth in Section 2.6.

(vv) "**Then Outstanding Ordinary Shares**" shall mean, at any time, the issued and outstanding Ordinary Shares at such time, as well as all capital stock issued and outstanding as a result of any stock split, stock dividend, or reclassification of Ordinary Shares distributable, on a pro rata basis, to all holders of Ordinary Shares.

(ww) "**Third Party**" shall mean any Person other than the Investor, the Company or any Affiliate of the Investor or the Company.

(xx) "**Underwriters' Maximum Number**" shall have the meaning set forth in Section 2.1(c).

(yy) "**Underwritten Offering**" shall have the meaning set forth in Section 2.1(a).

2. Registration Rights.

2.1 Demand Registration.

(a) Subject to the provisions hereof, after the Restricted Term, the Investor and any Permitted Transferee of the Investor (each a "**Holder**") holding, collectively, a majority of the Registrable Securities then outstanding shall have the right to require the Company to file a Registration Statement registering for sale all or part of the Shares held by or issuable to them (collectively, the "**Registrable Securities**") under the Securities Act (a "**Demand Registration**") by delivering a written request therefor to the Company (i) specifying the number of Registrable Securities to be included in such registration by such Holder or Holders, (ii) specifying whether the intended method of disposition thereof is pursuant to an underwritten public offering of Ordinary Shares by the Company (an "**Underwritten Offering**"), and (iii) containing all information about such Holder required to be included in such Registration Statement in accordance with applicable Law. The Company shall use commercially reasonable efforts to effect such registration (including, without limitation, appropriate qualification under applicable blue sky or other state securities Laws and appropriate compliance with applicable regulations issued under the Securities Act and any other governmental requirements or regulations) of the Registrable Securities that the Company has been so requested to register as soon as practicable (and in any case by the applicable Filing Date); provided, however, that the Holders shall not make a request for a Demand Registration under this Section 2.1(a) for Registrable Securities having an anticipated aggregate offering price of less than $25,000,000. The Holders shall be entitled to require the Company to effect two (2) Demand Registrations under this Agreement.

(b) If the offering of the Registrable Securities pursuant to such Demand Registration is an Underwritten Offering, (i) the Company shall select the underwriter(s) of the Underwritten Offering, subject to the approval of the Holders of a majority of the Registrable Securities to be sold in the Underwritten Offering, such approval not to be unreasonably withheld, conditioned or delayed, and (ii) the Company shall (together with the Holders proposing to distribute their securities through such underwriting) enter into an underwriting agreement in customary form for underwriting agreements for firm commitment offerings by a selling holder of equity securities with the managing underwriter(s) proposing to

distribute their securities through such Underwritten Offering; provided, that (i) the representations and warranties by, and the other agreements on the part of, the Company to and for the benefit of the underwriter(s) shall also be made to and for the benefit of the Holders proposing to distribute their securities through the Underwritten Offering, (ii) no Holder shall be required to make any representations and warranties to, or agreements with, any underwriter in a registration other than customary representations, warranties and agreements and (iii) the liability of each Holder in respect of any indemnification, contribution or other obligation of such Holder arising under such underwriting agreement (a) shall be limited to losses arising out of or based upon an untrue statement or alleged untrue statement or omission or alleged omission made in such Registration Statement, any such preliminary Prospectus, final Prospectus, summary Prospectus, amendment or supplement, incorporated document or other such disclosure document or other document or report, in reliance upon and in conformity with written information furnished to the Company by or on behalf of such Holder expressly for inclusion therein and (b) shall not in any event, absent fraud or intentional misrepresentation, exceed an amount equal to the net proceeds to such Holder (after deduction of all underwriters' discounts and commissions) from the disposition of the Registrable Securities disposed of by such Holder pursuant to such Underwritten Offering.

(c) If, in connection with a Demand Registration in the form of an Underwritten Offering, the managing underwriter(s) give written advice to the Company of the number of securities to which such registration should, in the opinion of the managing underwriter(s) of such registration, in light of marketing factors, be limited (an "**Underwriters' Maximum Number**"), then the Company shall (i) so advise all Holders of Registrable Securities to be included in such Underwritten Offering and (ii) include in such registration (a) first, the number of securities requested to be included therein by holder(s) of Company securities having contractual rights to include Company securities in such registration (including, for the avoidance of doubt, the rights provided under the Investors' Rights Agreement, dated as of August 14, 2015, by and between the Company and the investors party thereto (the "**Prior Rights Holders**")) with priority over the Holders with respect to such registration, and (b) second, the number of securities requested to be included in such registration by all Holders of Registrable Securities to be included in such Underwritten Offering, pro rata on the basis of the aggregate number of Registrable Securities requested to be included by each such Holder, and on a *pari passu* basis with the holders of contractual registration rights provided under the Share Purchase Agreement by and between the Company and C.P. Pharmaceuticals International C.V. dated as of May 6, 2016 (the "**Pfizer Holders**").

(d) A registration will not be deemed to have been effected as a Demand Registration unless the Registration Statement relating thereto has been declared effective by the SEC, at least seventy five percent (75%) of the Registrable Securities requested to be included in the registration by the Holders are included in such registration, and the Company has complied in all material respects with its obligations under this Agreement with respect thereto; provided, however, that if, after it has become effective, (i) such Registration Statement or the related offer, sale or distribution of Registrable Securities thereunder is or becomes the subject of any stop order, injunction or other order or requirement of the SEC or any other governmental or administrative agency, or if any court prevents or otherwise limits the sale of the Registrable Securities pursuant to the registration (each, an "**Interference**"), which Interference does not result from any act or omission of any Holder whose Registrable Securities

are registered pursuant to such Registration Statement and is not cured within forty five (45) days thereof, and (ii) in each case less than seventy five percent (75%) of the Registrable Securities covered by the effective Registration Statement are actually sold by the selling Holder or Holders pursuant to the Registration Statement, then such registration will be deemed not to have been effected for purposes of the last sentence of Section 2.1(a). If (i) a registration requested pursuant to this Section 2.1 is deemed not to have been effected as a Demand Registration or (ii) the registration requested pursuant to this Section 2.1 does not remain continuously effective until the completion of the distribution by the Holders of the Registrable Securities covered by such registration, then the Company shall continue to be obligated to effect a Demand Registration pursuant to this Section 2.1 of the Registrable Securities included in such registration. In circumstances not including the events described in the immediately two preceding sentences of this Section 2.1(d), each Holder of Registrable Securities shall be permitted voluntarily to withdraw all or any part of its Registrable Securities from a Demand Registration at any time prior to the commencement of marketing of such Demand Registration, provided that such registration nonetheless shall count as a Demand Registration for purposes of the last sentence of Section 2.1(a).

2.2 Piggyback Registration.

(a) After the expiration or earlier termination of the Collaboration Agreement, if (and on each occasion that) the Company proposes to register any of its securities under the Securities Act (other than (i) pursuant to Section 2.1, (ii) in connection with registrations on Form S-4 or S-8 promulgated by the SEC or any successor or similar forms, (iii) in connection with a transaction conducted pursuant to Rule 145 of the Securities Act, or (iv) in connection with registrations on any registration form that does not permit secondary sales or does not include substantially the same information as would be required to be included in a registration statement covering the sale of Registrable Securities), whether for its own account or the account of any of its security holders (each such registration not withdrawn or abandoned prior to the effective date thereof being herein referred to as a "**Piggyback Registration**"), the Company shall give written notice to the Holders of such proposal promptly, but in no event later than ten (10) Business Days prior to the anticipated filing date. Each Holder shall keep confidential and not disclose to any Third Party its receipt of any such notice and any information regarding such proposed offering.

(b) Subject to the provisions contained in paragraphs (a) and (c) of this Section 2.2 and the last sentence of this paragraph (b), the Company will be obligated and required to include in each Piggyback Registration such Registrable Securities as requested in a written notice from any Holder delivered to the Company no later than ten (10) Business Days following delivery of the notice from the Company specified in Section 2.2(a). If a Piggyback Registration is an Underwritten Offering, the Company shall (together with the Holders proposing to distribute their securities through such underwriting) enter into an underwriting agreement with the managing underwriter(s) in customary form for underwriting agreements for such an offering. The Company may terminate or withdraw any Piggyback Registration prior to the effectiveness of such registration, whether or not the Holders have elected to include Registrable Securities in such registration.

(c) If a Piggyback Registration is an Underwritten Offering on behalf of a holder of Company securities other than Holders (including, for the avoidance of doubt, the Prior Rights Holders or the Pfizer Holders), and the managing underwriter(s) advise the Company that in their reasonable opinion the number of securities proposed to be included in such registration exceeds the Underwriters' Maximum Number, then the Company shall include in such registration (i) first, the number of securities to be sold by the Company (if any), (ii) second, the number of securities requested to be included therein by such holder(s) requesting such registration, (iii) third, the number of securities requested to be included therein by all Holders who have requested registration of Registrable Securities in accordance with Section 2.2(a), pro rata on the basis of the aggregate number of Registrable Securities requested to be included by each such Holder, and on a *pari passu* basis with the Pfizer Holders, and (iv) fourth, any other securities that have been requested to be so included by any other Person. If a Piggyback Registration is an Underwritten Offering on behalf of the Company, and the managing underwriter(s) advise the Company that in their reasonable opinion the number of securities proposed to be included in such registration exceeds the Underwriters' Maximum Number, then the Company shall include in such registration (i) first, the number of securities to be sold by the Company, (ii) second, the number of securities requested to be included therein by holder(s) with priority over the Holders with respect to such registration, (iii) third, the number of securities requested to be included therein by all Holders who have requested registration of Registrable Securities in accordance with Section 2.2(a), pro rata on the basis of the aggregate number of Registrable Securities requested to be included by each such Holder, and on a *pari passu* basis with the Pfizer Holders, and (iv) fourth, any other securities that have been requested to be so included by any other Person.

(d) In any Piggyback Registration that is an Underwritten Offering, the Company shall have the right to select the managing underwriter(s) for such registration.

2.3 Registration Expenses. In connection with registrations pursuant to Section 2.1 or Section 2.2 hereof, the Company shall pay all of the costs and expenses incurred in connection with the registrations thereunder (the "**Registration Expenses**"), including all (i) registration and filing fees and expenses, including, without limitation, those related to filings with the SEC, (ii) fees and expenses of compliance with state securities or blue sky Laws (including reasonable fees and disbursements of counsel in connection with blue sky qualifications of the Registrable Securities), (iii) reasonable processing, duplicating and printing expenses, including expenses of printing Prospectuses reasonably requested by any Holder, (iv) the Company's internal expenses (including, without limitation, all salaries and expenses of its officers and employees performing legal or accounting duties, the expense of any liability insurance and the expense of any annual audit or quarterly review), (v) fees and expenses incurred in connection with listing the Registrable Securities for trading on a national securities exchange, (vi) fees and expenses in connection with the preparation of the registration statement and related documents covering the Registrable Securities, (vii) fees and expenses, if any, incurred with respect to any filing with FINRA, (viii) any documented out-of-pocket expenses of the underwriter(s) incurred with the approval of the Company, (ix) the cost of providing any CUSIP or other identification numbers for the Registrable Securities, (x) fees and expenses and disbursements of counsel for the Company and fees and expenses for independent certified public accountants retained by the Company (including, without limitation, the expenses of any comfort letters or costs associated with the delivery by independent certified public accountants

of a comfort letter or comfort letters requested), (xi) fees and expenses of any special experts retained by the Company in connection with such registration, and (xii) reasonable and documented fees and expenses of one firm of counsel for the Holders to be selected by the Holders of a majority of the Registrable Securities to be included in such registration ("**Holders' Counsel**") not to exceed $40,000. Notwithstanding the foregoing, the Holders shall be responsible, on a pro rata basis based on the number of Registrable Securities included in the applicable registered offering by each such Holder, for any underwriting discounts, commissions and stock transfer fees attributable to the sale of Registrable Securities pursuant to a Registration Statement and any other out-of-pocket expenses of the Holders not required to be paid by the Company pursuant to this Section 2.3. The obligation of the Company to bear the expenses described in this Section 2.3 and to pay or reimburse the Holders for the expenses described in this Section 2.3 shall apply irrespective of whether any sales of Registrable Securities ultimately take place; provided, however, that the Company shall not be required to pay any expenses of any Demand Registration 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 on a pro rata basis based on the number of Registrable Securities included in the applicable registered offering by each such Holder).

2.4 Registration Procedures. In the case of each registration effected by the Company pursuant to this Agreement, the Company shall keep each Holder advised in writing as to the initiation of each registration and as to the completion thereof. In connection with any such registration:

(e) The Company will, within forty-five (45) days (or sixty (60) days if the Company is required to file a Form S-1) after its receipt of the request for registration under Section 2.1(a), prepare and file with the SEC a Registration Statement on Form S-3 or another appropriate Securities Act form reasonably acceptable to the Holders, and use commercially reasonable efforts to cause such Registration Statement to become and remain effective until the completion of the distribution contemplated thereby.

(f) The Company will (i) promptly prepare and file with the SEC such amendments to each Registration Statement as may be necessary to keep such Registration Statement effective for as long as such registration is required to remain effective pursuant to the terms hereof, (ii) cause the Prospectus to be supplemented by any required Prospectus supplement, and, as so supplemented, to be filed pursuant to Rule 424 under the Securities Act, and (iii) comply with the provisions of the Securities Act applicable to it with respect to the disposition of all Registrable Securities covered by such Registration Statement during the applicable period in accordance with the intended methods of disposition by the Holders set forth in such Registration Statement or supplement to the Prospectus.

(g) The Company will, at least five (5) Business Days prior to filing a Registration Statement or Prospectus or any amendment or supplement to such Registration Statement or Prospectus, furnish to (i) each Holder of Registrable Securities covered by such Registration Statement, (ii) Holders' Counsel and (iii) each underwriter of the Registrable Securities covered by such Registration Statement, copies of such Registration Statement and each amendment or supplement as proposed to be filed, together with any exhibits thereto, which documents will be subject to reasonable review and comment by each of the foregoing Persons,

and thereafter, furnish to such Holders, Holders' Counsel and the underwriter(s), if any, such number of copies of such Registration Statement, each amendment and supplement thereto (in each case including all exhibits thereto and documents incorporated by reference therein), the Prospectus included in such Registration Statement (including each preliminary Prospectus) and such other documents or information as such Holder, Holders' Counsel or the underwriter(s) may reasonably request in order to facilitate the disposition of the Registrable Securities in accordance with the plan of distribution set forth in the Prospectus included in the Registration Statement.

(h) The Company shall furnish to each Holder a copy of all documents filed with and all correspondence from or to the SEC in connection with the offering of Registrable Securities.

(i) The Company will promptly notify each Holder of any stop order issued or threatened by the SEC and, if entered, use commercially reasonable efforts to prevent the entry of such stop order or to remove it as soon as reasonably possible.

(j) On or prior to the date on which the Registration Statement is declared effective, the Company shall use commercially reasonable efforts to register or qualify such Registrable Securities under such other securities or blue sky Laws of such jurisdictions as any Holder reasonably requests and use commercially reasonable efforts to keep each such registration or qualification (or exemption therefrom) effective during the period which the Registration Statement is required to be kept effective pursuant to the terms hereof; provided that the Company will not be required to (i) qualify generally to do business in any jurisdiction where it would not otherwise be required to qualify but for this paragraph (f), (ii) subject itself to taxation in any such jurisdiction or (iii) consent to general service of process in any such jurisdiction.

(k) The Company will notify each Holder, Holders' Counsel and the underwriter(s) promptly and (if requested by any such Person) confirm such notice in writing, (i) when a Prospectus or any Prospectus supplement or post-effective amendment has been filed and, with respect to a Registration Statement or any post-effective amendment, when the same has become effective, (ii) of any request by the SEC or any other federal or state governmental authority for amendments or supplements to a Registration Statement or Prospectus or for additional information to be included in any Registration Statement or Prospectus or otherwise, (iii) of the issuance by any state securities commission or other regulatory authority of any order suspending the qualification or exemption from qualification of any of the Registrable Securities under state securities or blue sky Laws or the initiation of any proceedings for that purpose, and (iv) of the happening of any event that requires the making of any changes in a Registration Statement or related Prospectus or any document incorporated or deemed to be incorporated by reference therein so that they will not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements in the Registration Statement and Prospectus not misleading in light of the circumstances in which they were made; and, as promptly as practicable thereafter, prepare and file with the SEC and furnish a supplement or amendment to such Prospectus so that, as thereafter deliverable to the purchasers of such Registrable Securities, such Prospectus will not contain any untrue statement

of a material fact or omit to state a material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading.

(l) The Company and the Holders will furnish customary closing certificates and other deliverables to the underwriter(s) (including, if applicable, an underwriting agreement in customary form) and take such other actions as are reasonably required in order to expedite or facilitate the disposition of the Registrable Securities.

(m) The Company shall use commercially reasonable efforts to cause all Registrable Securities registered pursuant to the terms hereof to be listed on each national securities exchange on which the Ordinary Shares are then listed.

(n) The Company shall use commercially reasonable efforts to cooperate and assist in obtaining of all necessary approvals from FINRA, if any.

(o) The Company otherwise shall use its commercially reasonable efforts to comply with all applicable rules and regulations of the SEC.

2.5 Holders' Obligations. The Company may require each Holder to promptly furnish in writing to the Company such information as the Company may from time to time reasonably request in connection with the distribution of the Registrable Securities and such other information as may be legally required in connection with such registration, including all such information as may be requested by the SEC. Each Holder agrees that, notwithstanding the provisions of Section 2.6 hereof, upon receipt of any notice from the Company of the happening of any event of the kind described in Section 2.4(g) hereof, such Holder will forthwith discontinue disposition of Registrable Securities pursuant to the Registration Statement covering such Registrable Securities until such Holder's receipt of the copies of the supplemented or amended Prospectus contemplated by Section 2.4(g) hereof, and, if so directed by the Company, such Holder will deliver to the Company all copies, other than permanent file copies then in such Holder's possession and retained solely in accordance with record retention policies then-applicable to such Holder, of the most recent Prospectus covering such Registrable Securities at the time of receipt of such notice.

2.6 Blackout Provisions. Notwithstanding anything in this Agreement to the contrary, by delivery of written notice to the participating Holders (a "**Suspension Notice**") stating which one or more of the following limitations shall apply to the addressee of such Suspension Notice, the Company may (i) postpone effecting a registration under this Agreement, or (ii) require such addressee to refrain from disposing of Registrable Securities under the registration, in either case for a period of no more than ninety (90) consecutive days from the delivery of such Suspension Notice (which period may not be extended or renewed). The Company may postpone effecting a registration or apply the limitations on dispositions specified in clause (ii) of this Section 2.6 if (x) within ninety (90) days of receipt of a request for Demand Registration under Section 2.1(a), the Company has a good faith expectation to file a registration statement for the public offering of securities for the account of the Company, provided, that the Company is actively employing good faith efforts to cause such registration statement to become effective, (y) the Company's board of directors, in good faith, determines that such registration or disposition would materially impede, delay or interfere with any material transaction then

pending or proposed to be undertaken by the Company or any of its subsidiaries, or (z) the Company in good faith determines that the Company is in possession of material non-public information the disclosure of which during the period specified in such notice the Company's board of directors, in good faith, reasonably believes would be materially detrimental to the Company; *provided*, that the Company may not take any actions pursuant to this Section 2.6 more than twice in any twelve (12)-month period. Furthermore, the Company shall not be required to effect any registration of Registrable Securities at any time during the period any Holder is in breach of or has failed to cause its Affiliates to comply with the obligations and restrictions of Sections 3, 4 or 5 of this Agreement, the Company has provided notice of such breach to such Holder, and such breach or failure is ongoing and has not been remedied.

2.7 Indemnification.

(p) Indemnification by the Company. The Company agrees to indemnify and hold harmless each Holder including Registrable Securities in any registration statement filed pursuant to this Section 2 and each of its officers, directors, employees and agents, and each Person, if any, who controls such Holder within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act, together with the officers, directors, employees and agents of such controlling Person (each, a "**Controlling Person**"), from and against any and all losses, claims, damages, settlement amounts (only if the Company consented in writing to the settlement, which consent shall not be unreasonably withheld), liabilities, reasonable attorneys' fees, costs and expenses of investigating and defending any such claim (collectively, "**Damages**") and any action in respect thereof to which such Holder, its Controlling Persons and their respective officers, directors, employees and agents may become subject to under the Securities Act or otherwise, insofar as such Damages (or proceedings in respect thereof) arise out of, or are based upon, any untrue statement or alleged untrue statement of a material fact contained in any Registration Statement or Prospectus (or any amendment or supplement thereto) or any preliminary Prospectus of the Company, or arise out of, or are based upon, any omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading in light of the circumstances in which they were made, except insofar as (i) the same are based upon information furnished in writing to the Company by such Holder, any of its Controlling Persons, or any of their respective officers, directors, employees and agents expressly for use therein, and (ii) any Damages are caused by such Holder's disposition of Registrable Securities during any period during which such Holder is obligated to discontinue any disposition of Registrable Securities as a result of any stop order suspending the effectiveness of any Registration Statement or Prospectus with respect to Registrable Securities of which such Holder has received written notice from the Company. The Company shall reimburse such Holder for any legal and other expenses reasonably incurred in investigating or defending or preparing to defend against any such Damages or proceedings. In addition to the indemnity contained herein, the Company will reimburse each such Person for its reasonable out-of-pocket legal and other expenses (including the reasonable out-of-pocket cost of any investigation, preparation and travel in connection therewith) as incurred in connection therewith, as promptly as practicable after such expenses are incurred and invoiced.

(q) Indemnification by the Holders. Each Holder agrees, severally and not jointly, to indemnify and hold harmless the Company, its officers, directors, employees and

agents and each Person, if any, who controls the Company within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act, together with the officers, directors, employees and agents of such Controlling Person, to the same extent as the foregoing indemnity from the Company to each Holder, but only with respect to information related to such Holder, its Controlling Persons or its plan of distribution, furnished in writing by such Holder, its Controlling Persons or any of their respective officers, directors, employees and agents to the Company expressly for use in any Registration Statement or Prospectus, or any amendment or supplement thereto, or any preliminary Prospectus. In addition to the indemnity contained herein, such Holder will reimburse the Company for its reasonable out-of-pocket legal and other expenses (including the reasonable out-of-pocket cost of any investigation, preparation and travel in connection therewith) as incurred in connection therewith, as promptly as practicable after such expenses are incurred and invoiced.

(r) Conduct of Indemnification Proceedings. Promptly after receipt by any Person entitled to indemnification pursuant to Section 2.7(a) or Section 2.7(b) (an "**Indemnified Party**") of notice of any claim or the commencement of any action in respect of which indemnity may be sought pursuant to Section 2.7(a) or Section 2.7(b), the Indemnified Party shall, if a claim in respect thereof is to be made against the Person against whom such indemnity may be sought (an "**Indemnifying Party**"), notify the Indemnifying Party in writing of the claim or the commencement of such action; provided, that the failure to notify the Indemnifying Party shall not relieve it from any liability that it may have to an Indemnified Party other than under Section 2.7(a) or Section 2.7(b) except to the extent of any actual prejudice resulting therefrom. If any such claim or action shall be brought against an Indemnified Party, and it shall notify the Indemnifying Party thereof, the Indemnifying Party shall be entitled to participate therein, and, to the extent that it wishes, jointly with any other similarly notified Indemnifying Party, to assume the defense thereof with counsel reasonably satisfactory to the Indemnified Party. After notice from the Indemnifying Party to the Indemnified Party of its election to assume the defense of such claim or action, the Indemnifying Party shall not be liable to the Indemnified Party for any legal or other expenses subsequently incurred by the Indemnified Party in connection with the defense thereof other than reasonable costs of investigation; provided, that the Indemnified Party shall have the right to employ separate counsel to represent the Indemnified Party and its Controlling Persons who may be subject to liability arising out of any claim in respect of which indemnity may be sought by the Indemnified Party against the Indemnifying Party, but the fees and expenses of such counsel shall be for the account of such Indemnified Party unless (i) the Indemnifying Party and the Indemnified Party shall have mutually agreed to the retention of, and reimbursement of fees for, such counsel or (ii) in the reasonable opinion of counsel to such Indemnified Party representation of both parties by the same counsel would be inappropriate due to actual or potential conflicts of interest between them, it being understood, however, that the Indemnifying Party shall not, in connection with any one such claim or action or separate but substantially similar or related claims or actions in the same jurisdiction arising out of the same general allegations or circumstances, be liable for the fees and expenses of more than one separate firm of attorneys (together with appropriate local counsel) at any time for all Indemnified Parties. No Indemnifying Party shall, without the prior written consent of the Indemnified Party, effect any settlement of any claim or pending or threatened proceeding in respect of which the Indemnified Party is or would reasonably have been a party and indemnity would reasonably have been sought hereunder by such Indemnified Party, unless such settlement includes an unconditional release of such Indemnified Party from

all liability arising out of such claim or proceeding. Whether or not the defense of any claim or action is assumed by the Indemnifying Party, such Indemnifying Party will not be subject to any liability for any settlement made without its written consent.

2.8 Limitations on Subsequent Registration Rights. From and after the date of this Agreement, the Company shall not enter into any agreement granting any holder or prospective holder of any Company securities registration rights with respect to such securities without the prior written consent of the Holders of a majority of the Registrable Securities then outstanding, unless such registration rights are *pari passu* with respect to the cut-back provisions contained in this Section 2.

2.9 Assignment of Registration Rights

. The rights to cause the Company to register any Registrable Securities pursuant to this Agreement may be assigned in whole or in part (but only with all restrictions and obligations set forth in this Agreement) by a Holder to a Permitted Transferee which acquires Registrable Securities from such Holder; provided, however, (a) such Holder shall, within five (5) days prior to such transfer, furnish to the Company written notice of the name and address of such Permitted Transferee, details of its status as a Permitted Transferee and details of the Registrable Securities with respect to which such registration rights are being assigned, (b) the Permitted Transferee, prior to or simultaneously with such transfer or assignment, shall agree in writing to be subject to and bound by all restrictions and obligations set forth in this Agreement, (c) the Investor shall continue to be bound by all restrictions and obligations set forth in this Agreement and (d) such transfer or assignment shall be effective only if immediately following such transfer or assignment the further disposition of such Registrable Securities by the Permitted Transferee is restricted under the Securities Act and other applicable securities Law.

3. Restrictions on Beneficial Ownership.

3.1 Standstill. During the period (such period, the "**Restricted Term**") from and after the date of this Agreement until the earliest to occur of (i) the expiration or earlier termination of the Collaboration Agreement and (ii) the fourth (4th) anniversary of the Closing Date (as defined in the Purchase Agreement), neither the Investor nor any of its Affiliates (collectively, the "**Standstill Parties**") shall (and the Investor shall cause its Affiliates not to), except as expressly approved or invited in writing by the Company:

(a) directly or indirectly, acquire beneficial ownership of Then Outstanding Ordinary Shares and/or Ordinary Shares Equivalents, or make a tender, exchange or other offer to acquire Then Outstanding Ordinary Shares and/or Ordinary Shares Equivalents, if after giving effect to such acquisition, the Standstill Parties would beneficially own more than the Standstill Limit; provided, however, that notwithstanding the provisions of this Section 3.1(a), if the number of shares constituting Then Outstanding Ordinary Shares is reduced or if the aggregate ownership of the Standstill Parties is increased as a result of a repurchase by the Company of Then Outstanding Ordinary Shares, stock split, stock dividend or a recapitalization of the Company, the Standstill Parties shall not be required to dispose of any of their holdings of Then Outstanding Ordinary Shares even though such action resulted in the Standstill Parties' beneficial ownership totaling more than the Standstill Limit;

(b) directly or indirectly, seek to have called any meeting of the stockholders of the Company, propose or nominate for election to the Company's Board of Directors any person whose nomination has not been approved by a majority of the Company's Board of Directors or cause to be voted in favor of such person for election to the Company's Board of Directors any Then Outstanding Ordinary Shares;

(c) directly or indirectly, encourage or support a tender, exchange or other offer or proposal by any other Person (an "**Offeror**") the consummation of which would result in a Change of Control of the Company (an "**Acquisition Proposal**"); provided, however, that from and after the filing of a Schedule 14D-9 (or successor form of Tender Offer Solicitation/Recommendation Statement under Rule 14d-9 of the Exchange Act) by the Company recommending that stockholders accept any such offer, Investor shall not be prohibited from taking any of the actions otherwise prohibited by this Section 3.1(c) for so long as the Company maintains and does not withdraw such recommendation;

(d) directly or indirectly, solicit proxies or consents or become a participant in a solicitation (as such terms are defined in Regulation 14A under the Exchange Act) in opposition to the recommendation of a majority of the Company's Board of Directors with respect to any matter, or seek to advise or influence any Person, with respect to voting of any Then Outstanding Ordinary Shares;

(e) deposit any Then Outstanding Ordinary Shares in a voting trust or subject any Then Outstanding Ordinary Shares to any arrangement or agreement with respect to the voting of such Then Outstanding Ordinary Shares;

(f) propose (i) any merger, consolidation, business combination, tender or exchange offer, purchase of the Company's assets or businesses, or similar transaction involving the Company or (ii) any recapitalization, restructuring, liquidation or other extraordinary transaction with respect to the Company;

(g) act in concert with any Third Party to take any action in clauses (a) through (e) above, or form, join or in any way participate in a "partnership, limited partnership, syndicate, or other group" within the meaning of Section 13(d)(3) of the Exchange Act.

(h) enter into discussions, negotiations, arrangements or agreements with any Person relating to the foregoing actions referred to in (a) through (f) above; or

(i) request or propose to the Company's Board of Directors, any member(s) thereof or any officer of the Company that the Company amend, waive, or consider the amendment or waiver of, any provisions set forth in this Section 3.1 (including this clause (i));

provided, however, that (A) nothing contained in this Section 3.1 shall prohibit the Investor from making confidential, non-public proposals to the Company for a transaction of the type described in the foregoing clauses (a) and (f) that would result in a Change of Control, and (B) the mere voting in accordance with Section 5 hereof of any voting securities of the Company held by the Investor or its Affiliates shall not constitute a violation of any of clauses (a) through (h) above. Notwithstanding the foregoing, if at any time during the Restricted Term the Company executes

a transaction with any other Person that (i) results in such Person becoming the beneficial owner of Then Outstanding Ordinary Shares and/or Ordinary Share Equivalents in an amount equal to or greater than the percentage of ownership represented by the Shares on the date hereof and (ii) such transaction is a strategic collaboration or other strategic licensing arrangement with the Company, the Company shall offer to the Investor the opportunity to amend Section 3 and 5 of this Agreement in a manner such that such provisions would be consistent with the "standstill" and stockholder voting terms and conditions upon which the Company permitted such other Person to own and act (or fail to act) with respect to the Company and the Ordinary Shares.

4. Restrictions on Dispositions.

4.1 Lock-Up. During the Restricted Term, without the prior approval of a majority of the Company's Board of Directors, the Investor shall not, and shall cause its Affiliates not to, Dispose of (x) any of the Purchased Shares or any Ordinary Shares beneficially owned by any Standstill Party as of the date of this Agreement, together with any Ordinary Shares issued in respect thereof as a result of any stock split, stock dividend, share exchange, merger, consolidation or similar recapitalization, and (y) any Ordinary Shares issued as (or issuable upon the exercise of any warrant, right or other security that is issued as) a dividend or other distribution with respect to, or in exchange or in replacement of, the Ordinary Shares described in clause (x) of this sentence; provided, however, that the foregoing shall not prohibit the Investor from transferring Registrable Securities to a Permitted Transferee in accordance with and subject to the terms of Section 2.9.

4.2 Sale Limitations. Subject to the restrictions set forth in Section 4.1 and except for any transfer of Registrable Securities by the Investor to a Permitted Transferee in accordance with and subject to the terms of Sections 2.9 and 4.1, during the period beginning on the date of the expiration or earlier termination of the Restricted Term and ending on the first date that the Investor beneficially owns 4% (four percent) or less of the Then Outstanding Ordinary Shares, the Investor shall not, and shall cause its Affiliates not to, Dispose of any Then Outstanding Ordinary Shares and/or Ordinary Share Equivalents except (i) pursuant to a registered underwritten public offering in accordance with Section 2, (ii) in a manner consistent with the volume limitations set forth in Rule 144 under the Securities Act (whether or not such limitations would by their terms apply to such sales), or (iii) pursuant to privately negotiated sales in transactions exempt from the registration requirements under the Securities Act; to which the Company has no reasonable objection with respect to (x) the nature of the transferee or (y) the ability of the transferee to subsequently sell such Then Outstanding Ordinary Shares and/or Ordinary Shares Equivalents into the market without having a material and adverse impact on the market price of the Ordinary Shares.

4.3 Certain Tender Offers. Notwithstanding any other provision of this Section 4, this Section 4 shall not prohibit or restrict any Disposition of Then Outstanding Ordinary Shares and/or Ordinary Share Equivalents by the Standstill Parties into (a) a tender offer by a Third Party which is not opposed by the Company's Board of Directors (but only after the Company's filing of a Schedule 14D-9, or any amendment thereto, with the SEC disclosing the recommendation of the Company's Board of Directors with respect to such tender offer) or (b) an issuer tender offer by the Company.

4.4 Offering Lock-Up. At any time that the Holders beneficially own at least five percent (5%) of the Outstanding Ordinary Shares or participate in an offering of Ordinary Shares, the Holders shall, if requested by the Company and an underwriter of Ordinary Shares, agree not to Dispose of any Then Outstanding Ordinary Shares and/or Ordinary Shares Equivalents for a specified period of time, such period of time not to exceed ninety (90) days. Such agreement shall be in writing in a form satisfactory to the Company and the underwriter(s) in such offering. The Company may impose stop transfer instructions with respect to the Then Outstanding Ordinary Shares and/or Ordinary Share Equivalents subject to the foregoing restrictions until the end of the specified period of time. The foregoing provisions of this Section 4.4 shall apply to the Holders only if the Company's directors and officers are subject to similar lock-up restrictions.

5. Voting Agreement.

5.1 Voting of Securities.

(a) During the Restricted Term, other than as permitted by Section 5.2 with respect to Extraordinary Matters, in any vote or action by written consent of the stockholders of the Company (including, without limitation, with respect to the election of directors), the Investor shall, and shall cause its respective Affiliates to, vote or execute a written consent with respect to all voting securities of the Company as to which they are entitled to vote or execute a written consent in accordance with the recommendation of the Company's board of directors.

(b) In furtherance of this Section 5.1, the Investor hereby irrevocably appoints the Company and any individuals designated by the Company, and each of them individually, as the attorneys, agents and proxies, with full power of substitution and re-substitution in each of them, for the Investor, and in the name, place and stead of the Investor, to vote (or cause to be voted) or, if applicable, to give consent, in such manner as each such attorney, agent and proxy or his substitute shall in its, his or her sole discretion deem appropriate or desirable with respect to such matters as set forth in Section 5.1(a) with respect to all voting securities (whether taking the form of Ordinary Shares or other voting securities of the Company) with respect to which the Investor is or may be entitled to vote at any meeting of the Company held after the date hereof, whether annual or special and whether or not an adjourned meeting or, if applicable, to give written consent with respect thereto (the "**Irrevocable Proxy**"). This Irrevocable Proxy is coupled with an interest, shall be irrevocable and binding on any successor in interest of the Investor and shall not be terminated by operation of law upon the occurrence of any event. This Irrevocable Proxy shall operate to revoke and render void any prior proxy as to voting securities of the Company heretofore granted by the Investor which is inconsistent herewith. Notwithstanding the foregoing, the Irrevocable Proxy shall be effective only if, at any annual or special meeting of the stockholders of the Company (or any consent in lieu thereof) and at any adjournments or postponements of any such meetings, the Investor (A) fails to appear or otherwise fails to cause its voting securities of the Company to be counted as present for purposes of calculating a quorum, or (B) fails to vote such voting securities in accordance with Section 5.1(a), in each case at least five (5) Business Days prior to the date of such shareholders' meeting (or within five (5) Business Days prior to the effective time of an

action to be taken by written consent in lieu of such shareholders' meeting). The Irrevocable Proxy shall terminate upon the earlier of the expiration or termination of the Restricted Term.

(c) The Investor shall cause any Affiliate of the Investor that may from time to time own of record (or the record holder holding on behalf of such Affiliate if owned beneficially) voting securities of the Company (whether taking the form of Ordinary Shares or other voting securities of the Company), if and when requested by the Company from time to time, to promptly execute and deliver to the Company an irrevocable proxy, substantially in the form of Exhibit A attached hereto, and irrevocably appoint the Company and any individuals designated by the Company, and each of them individually, with full power of substitution and resubstitution, as its attorney, agent and proxy to vote (or cause to be voted) or to give consent with respect to, all of the voting securities of the Company as to which such Affiliate is entitled to vote, in such manner as each such attorney, agent and proxy or his substitute shall in its, his or her sole discretion deem appropriate or desirable with respect to the matters set forth in this Section 5.1 (the "**Affiliate Irrevocable Proxy**"). The Investor acknowledges, and shall cause its Affiliates to acknowledge, that any such proxy executed and delivered shall be coupled with an interest, shall constitute, among other things, an inducement for the Company to enter into this Agreement, shall be irrevocable and binding on any successor in interest of such Affiliate and shall not be terminated by operation of Law upon the occurrence of any event. Such proxy shall operate to revoke and render void any prior proxy as to any voting securities of the Company heretofore granted by such Affiliate, to the extent it is inconsistent herewith. The Investor acknowledges and agrees that it shall be a condition to any proposed transfer of voting securities of the Company by the Investor to such Affiliate that such Affiliate execute and deliver to the Company an Affiliate Irrevocable Proxy, and that any purported transfer shall be void and of no force or effect if such Affiliate Irrevocable Proxy is not so executed and delivered at the closing of such transfer. Such proxy shall terminate upon the earlier of the expiration or termination of the Restricted Term.

5.2 Certain Extraordinary Matters. Notwithstanding anything to the contrary in Section 5.1, the Investor and its Affiliates may vote, or execute a written consent with respect to, any or all of the Ordinary Shares or other voting securities of the Company as to which they are entitled to vote or execute a written consent, as they may determine in their sole discretion, with respect to the following matters (each such matter being an "**Extraordinary Matter**"):

(a) any transaction that would result in a Change of Control; and

(b) any liquidation or dissolution of the Company.

5.3 Quorum. In furtherance of Section 5.1, the Investor shall be, and shall cause each of its Affiliates to be, present in person or represented by proxy at all meetings of stockholders to the extent necessary so that all voting securities of the Company as to which they are entitled to vote shall be counted as present for the purpose of determining the presence of a quorum at such meeting.

6. Termination of Certain Rights and Obligations.

6.1 Termination of Registration Rights. Except for Section 2.7, which shall survive until the expiration of any applicable statutes of limitation, Section 2 shall terminate automatically and have no further force or effect upon the earliest to occur of:

(a) the fifth anniversary of the expiration or earlier termination of the Collaboration Agreement;

(b) the date on which the Ordinary Shares cease to be registered pursuant to Section 12 of the Exchange Act; and

(c) a liquidation or dissolution of the Company.

6.2 Termination of Standstill Agreement. Provided that none of the Standstill Parties has violated Section 3.1(c), (d) or (f) with respect to the Offeror referred to in this Section 6.2, Section 3 shall terminate and have no further force or effect, upon the earliest to occur of:

(a) the public announcement by the Company or any Offeror of any definitive agreement between the Company and such Offeror and/or any of its Affiliates providing for a Change of Control of the Company;

(b) the filing of a Tender Offer Statement on Schedule TO (or a successor form of Tender Offer Statement under Rule 14d-100 of the Exchange Act) with the SEC by a Third Party offering to acquire all or substantially all of the Ordinary Shares;

(c) the expiration or termination of the Restricted Term;

(d) the date on which the Ordinary Shares cease to be registered pursuant to Section 12 of the Exchange Act; and

(e) a liquidation or dissolution of the Company;

provided, however, that if any of the transactions referred to in (a)-(e) above is abandoned or terminates and the no other similar transaction has been announced and not abandoned or terminates within ninety (90) days thereafter, the restrictions contained in Section 3 shall again be applicable.

6.3 Termination of Restrictions on Dispositions. Section 4 shall terminate and have no further force or effect upon the earliest to occur of:

(a) the consummation by an Offeror of a Change of Control of the Company;

(b) a liquidation or dissolution of the Company; and

(c) the date on which the Ordinary Shares cease to be registered pursuant to Section 12 of the Exchange Act.

6.4 Termination of Voting Agreement. Section 5 shall terminate and have no further force or effect upon the earliest to occur of:

(a) the consummation by an Offeror of a Change of Control of the Company;

(b) the expiration or termination of the Restricted Term;

(c) a liquidation or dissolution of the Company; and

(d) the date on which the Ordinary Shares cease to be registered pursuant to Section 12 of the Exchange Act.

6.5 Effect of Termination. No termination pursuant to any of Sections 6.1, 6.2, 6.3 or 6.4 shall relieve any of the parties (or the Permitted Transferee, if any) for liability for breach of or default under any of their respective obligations or restrictions under any terminated provision of this Agreement, which breach or default arose out of events or circumstances occurring or existing prior to the date of such termination.

7. Miscellaneous.

7.1 Governing Law; Jurisdiction. This Agreement shall be governed by, and construed in accordance with, the Laws of the State of New York, without regard to the conflict of laws principles thereof that would require the application of the Law of any other jurisdiction. The parties irrevocably and unconditionally submit to the exclusive jurisdiction of the United States District Court for the Southern District of New York solely and specifically for the purposes of any action or proceeding arising out of or in connection with this Agreement.

7.2 Waiver. Waiver by a party of a breach hereunder by the other party shall not be construed as a waiver of any subsequent breach of the same or any other provision. No delay or omission by a party in exercising or availing itself of any right, power or privilege hereunder shall preclude the later exercise of any such right, power or privilege by such party. No waiver shall be effective unless made in writing with specific reference to the relevant provision(s) of this Agreement and signed by a duly authorized representative of the party granting the waiver.

7.3 Notices. All notices, instructions and other communications hereunder or in connection herewith shall be in writing, shall be sent to the address of the relevant party set forth on Exhibit B attached hereto and shall be (a) delivered personally, (b) sent by registered or certified mail, return receipt requested, postage prepaid, (c) sent via a reputable nationwide overnight courier service or (d) sent by facsimile transmission, with a confirmation copy to be sent by registered or certified mail, return receipt requested, postage prepaid. Any such notice, instruction or communication shall be deemed to have been delivered upon receipt if delivered by hand, three (3) Business Days after it is sent by registered or certified mail, return receipt requested, postage prepaid, one (1) Business Day after it is sent via a reputable nationwide overnight courier service or when transmitted with electronic confirmation of receipt, if transmitted by facsimile (if such transmission is made during regular business hours of the recipient on a Business Day; or otherwise, on the next Business Day following such

transmission). Either party may change its address by giving notice to the other party in the manner provided above.

7.4 Entire Agreement. This Agreement and the Purchase Agreement contain the entire agreement among the parties with respect to the subject matter hereof and thereof and supersede all prior and contemporaneous arrangements or understandings, whether written or oral, with respect hereto and thereto.

7.5 Amendments. No provision in this Agreement shall be supplemented, deleted or amended except in a writing executed by an authorized representative of each of the parties hereto.

7.6 Headings; Nouns and Pronouns; Section References. Headings in this Agreement are for convenience of reference only and shall not be considered in construing this Agreement. Whenever the context may require, any pronouns used herein shall include the corresponding masculine, feminine or neuter forms, and the singular form of names and pronouns shall include the plural and vice-versa. References in this Agreement to a section or subsection shall be deemed to refer to a section or subsection of this Agreement unless otherwise expressly stated.

7.7 Severability. If, under applicable Laws, any provision hereof is invalid or unenforceable, or otherwise directly or indirectly affects the validity of any other material provision(s) of this Agreement in any jurisdiction ("**Modified Clause**"), then, it is mutually agreed that this Agreement shall endure and that the Modified Clause shall be enforced in such jurisdiction to the maximum extent permitted under applicable Laws in such jurisdiction; provided that the parties shall consult and use all reasonable efforts to agree upon, and hereby consent to, any valid and enforceable modification of this Agreement as may be necessary to avoid any unjust enrichment of either party and to match the intent of this Agreement as closely as possible, including the economic benefits and rights contemplated herein.

7.8 Assignment. Neither this Agreement nor any rights or duties of a party hereto may be assigned by such party, in whole or in part, without (a) the prior written consent of the Company in the case of any assignment by the Investor, except as provided by Section 2.9 with respect to the Investor's assignment to a Permitted Transferee; or (b) the prior written consent of the Investor in the case of an assignment by the Company.

7.9 Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and permitted assigns.

7.10 Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed an original but which together shall constitute one and the same instrument.

7.11 Third Party Beneficiaries. None of the provisions of this Agreement shall be for the benefit of or enforceable by any Third Party. No Third Party shall obtain any right under any provision of this Agreement or shall by reason of any such provision make any claim in respect of any debt, liability or obligation (or otherwise) against any party hereto.

7.12 No Strict Construction. This Agreement has been prepared jointly and will not be construed against either party.

7.13 Remedies. The rights, powers and remedies of the parties under this Agreement are cumulative and not exclusive of any other right, power or remedy which such parties may have under any other agreement or Law. No single or partial assertion or exercise of any right, power or remedy of a party hereunder shall preclude any other or further assertion or exercise thereof.

7.14 Specific Performance. The Company and the Investor hereby acknowledge and agree that the rights of the parties hereunder are special, unique and of extraordinary character, and that if any party refuses or otherwise fails to act, or to cause its Affiliates to act, in accordance with the provisions of this Agreement, such refusal or failure would result in irreparable injury to the Company or the Investor, as the case may be, the exact amount of which would be difficult to ascertain or estimate and the remedies at law for which would not be reasonable or adequate compensation. Accordingly, if any party refuses or otherwise fails to act, or to cause its Affiliates to act, in accordance with the provisions of this Agreement, then, in addition to any other remedy which may be available to any damaged party at law or in equity, such damaged party will be entitled to seek specific performance and injunctive relief, without posting bond or other security, and without the necessity of proving actual or threatened damages, which remedy such damaged party will be entitled to seek in any court of competent jurisdiction.

7.15 No Conflicting Agreements. The Investor hereby represents and warrants to the Company that neither it nor any of its Affiliates is, as of the date of this Agreement, a party to, and agrees that neither it nor any of its Affiliates shall, on or after the date of this Agreement, enter into any agreement that conflicts with the rights granted to the Company in this Agreement. The Company hereby represents and warrants to each Holder that it is not, as of the date of this Agreement, a party to, and agrees that it shall not, on or after the date of this Agreement, enter into, any agreement or approve any amendment to its Organizational Documents (as defined in the Purchase Agreement) with respect to its securities that conflicts with the rights granted to the Holders in this Agreement. The Company further represents and warrants that the rights granted to the Holders hereunder do not in any way conflict with the rights granted to any other holder of the Company's securities under any other agreements.

(Signature Page Follows)

IN WITNESS WHEREOF, the parties have executed and delivered this Agreement as of the date first above written.

TAKEDA PHARMACEUTICAL COMPANY LIMITED

By: /s/ Fumihiko Sato
Name: Fumihiko Sato
Title: Head of Portfolio Strategic Relations

WAVE LIFE SCIENCES LTD.

By: /s/ Paul B. Bolno
Name: Paul B. Bolno
Title: President and CEO

EXHIBIT A

FORM OF IRREVOCABLE PROXY

In order to secure the performance of the duties of the undersigned pursuant to Section 5.1 of the Investor Agreement, dated as of April 2, 2018 (the "**Agreement**"), by and between Takeda Pharmaceutical Company Limited and Wave Life Sciences Ltd. (the "**Company**"), the undersigned hereby irrevocably appoints the Company and any individual designated by the Company, and each of them individually, as the attorneys, agents and proxies, with full power of substitution and resubstitution in each of them, for the undersigned, and in the name, place and stead of the undersigned, to vote (or cause to be voted) or, if applicable, to give consent, in such manner as each such attorney, agent and proxy or his substitute shall in its, his or her sole discretion deem proper to record such vote (or consent) with respect to such matters as set forth in Section 5.1(a) of the Agreement with respect to all voting securities (whether taking the form of Ordinary Shares or other voting securities of the Company) which the undersigned is or may be entitled to vote at any meeting of the Company held after the date hereof, whether annual or special and whether or not an adjourned meeting or, if applicable, to give written consent with respect thereto. This proxy is coupled with an interest, shall be irrevocable and binding on any successor in interest of the undersigned and shall not be terminated by operation of law upon the occurrence of any event. This proxy shall operate to revoke and render void any prior proxy as to voting securities heretofore granted by the undersigned which is inconsistent herewith. Notwithstanding the foregoing, this irrevocable proxy shall be effective only if, at any annual or special meeting of the stockholders of the Company (or any consent in lieu thereof) and at any adjournments or postponements of any such meetings, the undersigned (A) fails to appear or otherwise fails to cause its voting securities of the Company to be counted as present for purposes of calculating a quorum, or (B) fails to vote such voting securities in accordance with Section 5.1(a) of the Agreement, in each case at least five (5) Business Days prior to the date of such stockholders' meeting (or within five (5) Business Days prior to the effective time of an action to be taken by written consent in lieu of such stockholders' meeting). This proxy shall terminate upon the earlier of the expiration or termination of the Restricted Term. All capitalized terms used herein and not otherwise defined shall have the meanings ascribed to such terms in the Agreement.

[_____]

By: _____

Name:

Title:

EXHIBIT B

NOTICES

(a) If to the Investor:

Takeda Pharmaceuticals U.S.A., Inc.
One Takeda Parkway
Deerfield, IL 60015
Attention: General Counsel

with a copy to:

Ropes & Gray LLP
Prudential Tower
800 Boylston Street
Boston, MA 02199-3600
Attention: Steven Wilcox and Zachary Blume

(b) If to the Company:

Wave Life Sciences Ltd.
733 Concord Avenue
Cambridge, MA 02138
Attention: General Counsel

with a copy to:

Goodwin Procter LLP
100 Northern Avenue
Boston, MA 02210
Attention: Kingsley L. Taft, Esq.
Gregg L. Katz, Esq.

Exhibit 31.1

CERTIFICATIONS UNDER SECTION 302

I, Paul B. Bolno, M.D., certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Wave Life Sciences Ltd.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

May 9, 2018

By: /s/ Paul B. Bolno, M.D.
Paul B. Bolno, M.D.
President and Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATIONS UNDER SECTION 302

I, Keith C. Regnante, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Wave Life Sciences Ltd.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

May 9, 2018

By: /s/ Keith C. Regnante
Keith C. Regnante
Chief Financial Officer
(Principal Financial Officer)

Exhibit 32

CERTIFICATIONS UNDER SECTION 906

Pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of section 1350, chapter 63 of title 18, United States Code), each of the undersigned officers of Wave Life Sciences Ltd. (the "Company"), does hereby certify, to such officer's knowledge, that:

The Quarterly Report for the quarter ended March 31, 2018 (the "Form 10-Q") of the Company fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, and the information contained in the Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: May 9, 2018

/s/ Paul B. Bolno, M.D.
Paul B. Bolno, M.D.
President and Chief Executive Officer
(Principal Executive Officer)

Dated: May 9, 2018

/s/ Keith C. Regnante
Keith C. Regnante
Chief Financial Officer
(Principal Financial Officer)