# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

## FORM 10-K/A

(Amendment N	No. 1)
(Mark One)	
✓ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE	E SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended D	ecember 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 SCI	ENCES LTD
(Exact name of registrant as sp	
Singapore (State or other jurisdiction of	Not applicable (I.R.S. Employer
incorporation or organization)	Identification No.)
7 Straits View #12-00, Marina One East Tower	040000
Singapore (Address of principal executive offices)	018936 (Zip code)
+65 6236 33 (Registrant's telephone number,	
Securities registered pursuant to	
<u>Title of Each Class</u> <b>\$0 Par Value Ordinary Shares</b>	Name of Each Exchange on Which Registered The Nasdaq Global Market
Securities registered pursuant to Sec	•
Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405	
Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or	
Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Somonths (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 $\boxtimes$ No $\Box$
Indicate by check mark whether the registrant has submitted electronically every Interactive Definition of this chapter) during the preceding 12 months (or for such shorter period that the registrant w	
Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-I best of registrant's knowledge, in definitive proxy or information statements incorporated by re	
Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company,"	
Large accelerated filer	Accelerated filer
Non-accelerated filer $\Box$	Smaller reporting company $\Box$
	Emerging growth company $\Box$
If an emerging growth company, indicate by check mark if the registrant has elected not to use accounting standards provided pursuant to Section 13(a) of the Exchange Act. $\Box$	the extended transition period for complying with any new or revised financial
Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of t	he Exchange Act). Yes $\square$ No $\boxtimes$
The aggregate market value of the registrant's voting and non-voting ordinary shares held by no included in such calculation is an affiliate) computed by reference to the price at which the ordinary completed second fiscal quarter (June 29, 2018) was \$746,006,159.	
The number of outstanding ordinary shares of the registrant as of April 1, 2019 was 34,255,406	i.
DOCUMENTS INCORPORAT	ED BY REFERENCE
None.	

#### EXPLANATORY NOTE

This Amendment No. 1 on Form 10-K/A (this "Amendment") amends the Annual Report on Form 10-K of Wave Life Sciences Ltd. (the "Company," "we," "our," "us" or "Wave") for the fiscal year ended December 31, 2018, as originally filed with the Securities and Exchange Commission (the "SEC") on March 1, 2019 (the "Original 10-K"). The purpose of this Amendment is to include information required by Part III of the Annual Report on Form 10-K that was intentionally omitted from Part III of the Original 10-K. In addition, this Amendment amends Item 15 of Part IV of the Original 10-K to update the exhibit list and to include new certifications by our principal executive officer and principal financial officer under Section 302 of the Sarbanes-Oxley Act of 2002, as required by Rule 12b-15 under the Securities Exchange Act of 1934, as amended (the "Exchange Act").

Except as described above, no other changes have been made to the Original 10-K. The Original 10-K continues to speak as of the dates described in the Original 10-K, and we have not updated the disclosures contained therein to reflect any events that occurred subsequent to such dates. Accordingly, this Amendment should be read in conjunction with the Company's filings made with the SEC subsequent to the filing of the Original 10-K, as information in such filings may update or supersede certain information contained in this Amendment. As used in this Amendment, 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.

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

#### SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Amendment contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Exchange Act that involve substantial risks and uncertainties. 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. These statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from the information expressed or implied by these forward-looking statements. Although we believe that we have a reasonable basis for each forward-looking statement contained in this Amendment, 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. Forward-looking statements include statements about our ability to fund our working capital requirements; our success, cost and timing of our product development activities and clinical trials; the timing of and our ability to obtain and maintain regulatory approvals for any of our product candidates; our ability to identify and develop new product candidates; our intellectual property position; our commercialization, marketing and manufacturing capabilities and strategy; our ability to develop sales and marketing capabilities; our estimates regarding future expenses and needs for additional financing; our ability to identify, recruit and retain key personnel; our financial performance; and developments and projections relating to our competitors in the industry. You should refer to

the "Risk Factors" section in the Original 10-K and in our other filings with the Securities and Exchange Commission for a discussion of important factors that may cause our actual results to differ materially from those expressed or implied by our forward-looking statements. As a result of these factors, we cannot assure you that the forward-looking statements in this Amendment 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 undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

## WAVE LIFE SCIENCES LTD.

## FORM 10-K/A

## TABLE OF CONTENTS

PART III		1
Item 10.	Directors, Executive Officers and Corporate Governance	1
Item 11.	Executive Compensation	Q
Item 12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	26
Item 13.	Certain Relationships and Related Transactions, and Director Independence	28
Item 14.	Principal Accounting Fees and Services	32
PART IV		34
Item 15.	Exhibits, Financial Statement Schedules	34
Item 16.	Form 10-K Summary	38
Signatures		39

#### PART III

#### Item 10. Directors, Executive Officers and Corporate Governance.

#### **Board of Directors**

Pursuant to our Constitution, there is no maximum number of directors that may hold office at any time. Our Board of Directors (the "Board" or our "Board") currently consists of seven members and each of our directors is elected annually.

Set forth below are the names of our directors, their ages as of April 1, 2019, their offices in the Company, if any, their principal occupations or employment for at least the past five years, the length of their tenure as directors and the names of other public companies in which they hold or have held directorships during the past five years. In addition, information about the specific experience, qualifications, attributes or skills that led to our Board's conclusion at the time of filing of this Amendment that each person listed below should serve as a director is set forth below:

Name	Age	Position/Title
Paul B. Bolno, M.D., MBA	45	President, Chief Executive Officer and Director
Christian Henry	51	Chairman of the Board
Peter Kolchinsky, Ph.D.	42	Director
Koji Miura	70	Director
Adrian Rawcliffe	46	Director
Ken Takanashi	54	Director
Gregory L. Verdine, Ph.D.	59	Director

Our Board has reviewed the materiality of any relationship that each of our directors has with the Company, either directly or indirectly. Based upon this review, our Board has determined that the following members of the Board are "independent directors" as defined by the Nasdaq Stock Market: Dr. Kolchinsky and Messrs. Henry, Miura, Rawcliffe, and Takanashi.

Paul B. Bolno, M.D., MBA has served as our President and Chief Executive Officer since December 2013 and as a director since April 2014. Prior to joining us, he served at GlaxoSmithKline from 2009 to 2013 in various roles, including Vice President, Worldwide Business Development—Head of Asia BD and Investments, Head of Global Neuroscience BD, a director of Glaxo Welcome Manufacturing, Pte. Ltd. in Singapore and Vice President, Business Development for the Oncology Business Unit, where he helped establish GlaxoSmithKline's global oncology business and served as a member of the Oncology Executive Team, Oncology Commercial Board and Cancer Research Executive Team. Prior to GlaxoSmithKline, he served as director of Research at Two River LLC, a health care private equity firm from 2004 to 2009. Dr. Bolno earned a medical degree from MCP-Hahnemann School of Medicine and an M.B.A. from Drexel University. He was a general surgery resident and cardiothoracic surgery postdoctoral research fellow at Drexel University College of Medicine. We believe that Dr. Bolno's experience serving as our President and Chief Executive Officer and a member of our Board and his experience leading biopharmaceutical companies qualify him to serve on our Board.

Christian Henry has served as a director since November 2016, and as Chairman of our Board since October 2017. Mr. Henry also serves on the board of directors of Ginkgo Bioworks, a private synthetic biology company, and Pacific Biosciences, a publicly traded life sciences company. Mr. Henry served as Executive Vice President & Chief Commercial Officer of Illumina, Inc. from 2015 through January 2017, and previously served as Senior Vice President & Chief Commercial Officer from 2014 to 2015, Senior Vice President & General Manager Genomic Solutions from 2012 to 2014, Senior Vice President, Chief Financial Officer & General Manager Life Sciences from 2010 to 2012, Senior Vice President, Corporate Development & Chief Financial Officer from 2009 to 2010, Senior Vice President & Chief Financial Officer from 2007 to 2009, and Vice President & Chief Financial Officer

from 2005 to 2006. Prior to joining Illumina, Inc., Mr. Henry served as the Chief Financial Officer of Tickets.com, Inc. from 2003 to 2005. From 1999 to 2003, Mr. Henry served as Vice President, Finance & Corporate Controller of Affymetrix, Inc. (acquired by Thermo Fisher Scientific in 2016). In 1997, Mr. Henry joined Nektar Therapeutics (formerly Inhale Therapeutic Systems, Inc.), as Corporate Controller, and later as its Chief Accounting Officer from 1997 to 1999. In 1996, Mr. Henry served as General Accounting Manager of Sugen, Inc. Mr. Henry began his career in 1992 at Ernst & Young LLP, where he was a Senior Accountant through 1996. Mr. Henry earned his B.A. in biochemistry and cell biology from the University of California, San Diego, and his M.B.A., with a concentration in finance, from the University of California, Irvine. We believe he is qualified to serve on our Board because of his strengths in corporate strategy, finance and operations, along with his extensive experience leading various functions at one of the largest and most innovative genetic healthcare companies.

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

Koji Miura has served as a director since October 2012. Mr. Miura is the founder and Managing Director of Miura & Associates Management Consultants Pte. Ltd. and serves on the boards of directors of Azeus Systems Holdings Ltd., Marine Tec Tachibana Pte. Ltd., Matsuura Singapore Pte. Ltd., Mercury Investment Holding Pte. Ltd., Sunmoon Pte. Ltd., and Triple Farm Singapore Pte. Ltd. Mr. Miura holds a bachelor's degree in Business Administration from the University of Aoyama Gakuin, Tokyo, Japan. We believe he is qualified to serve on our Board because of his broad business experience including his diverse background serving on the board of directors of various companies, both private and publicly held, across multiple industries.

Adrian Rawcliffe has served as a director since February 2017. Mr. Rawcliffe currently serves as Chief Financial Officer of Adaptimmune Therapeutics plc, where he has worked since 2015. Prior to joining Adaptimmune, Mr. Rawcliffe served in various roles at GlaxoSmithKline plc, including Senior Vice President Finance, North America Pharmaceuticals and Global Franchises from 2011 to 2015; Senior Vice President, Worldwide Business Development and R&D Finance from 2006 to 2011; Vice President, Worldwide Business Development Transactions and Ventures from 2003 to 2005; and Vice President, Deal Structuring from 2001 to 2003. From 2005 to 2006, Mr. Rawcliffe served as the President and Managing Partner of SR One Ltd. Mr. Rawcliffe began his career as a supervisor at Coopers & Lybrand (now PricewaterhouseCoopers) from 1993 to 1997. Mr. Rawcliffe received his B.Sc. in Natural Sciences from the University of Durham, England. Mr. Rawcliffe also received Chartered Accountancy training through The Institute of Chartered Accountants in England and Wales (ICAEW). We believe he is qualified to serve on our Board because of his global expertise, along with extensive business and operating experience at one of the world's largest global healthcare companies.

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

Gregory L. Verdine, Ph.D., is one of our founders and has served as a director since July 2013. He was our President, Chief Executive Officer and Chief Scientific Officer from our inception through December 2013 and served as Chairman of our Board from July 2013 through September 2017. Since 1989, Dr. Verdine has served as the Erving Professor of Chemistry in the Department of Stem Cell and Regenerative Biology and the Department of Chemistry and Chemical Biology at Harvard University and Harvard Medical School. Dr. Verdine co-founded the non-profit Gloucester Marine Genomics Institute and Gloucester Biotechnology Academy in 2013 and served as the Founding President until 2016. He is the co-founder of Fog Pharmaceuticals Inc. and LifeMine Therapeutics Inc. and serves as Chairman, President, Chief Executive Officer and Chief Scientific Officer for both companies. He is also the founder of Warp Drive Bio and served in various roles, from Chief Scientific Officer to Chief Executive Officer, from the company's inception in 2012 until April 2016. Dr. Verdine founded Enanta Pharmaceuticals and served as a member of its board of directors from 1990 through its initial public offering in 2013. He is a Venture Partner at WuXi Healthcare Ventures, and has previously served as Venture Partner at AppleTree Ventures, TPG Biotech and Third Rock Ventures. He has served on the Board of Scientific Counsellors of the National Cancer Institute, and is on the Board of Scientific Consultants of the Memorial Sloan Kettering Cancer Center, and he is a Senior Advisor to Shin Nippon Biomedical Laboratories Ltd. Dr. Verdine is also the co-founder of Eleven Biotherapeutics, Tokai Therapeutics, Aileron Therapeutics, and Gloucester Pharmaceuticals (acquired by Celgene in 2010). He has also served as a director of the Chemical Biology Initiative and the Program in Cancer Chemical Biology at the Dana-Farber Cancer Institute. Dr. Verdine received his Ph.D. in Chemistry from Columbia University and completed postdoctoral work in Molecular Biology at the Massachusetts Institute of Technology and Harvard Medical School. We believe he is qualified to serve on our Board because of his expertise and deep knowledge of our company, its technology and our industry and his long track record of creating and advising successful biopharmaceutical companies.

Pursuant to the Singapore Companies Act, Chapter 50 (the "Singapore Companies Act") and our Constitution, our Board must have at least one director who is ordinarily resident in Singapore. Mr. Miura is our Singapore resident director.

#### **Committees of the Board of Directors and Meetings**

Meeting Attendance. During the fiscal year ended December 31, 2018, there were five meetings of our Board, and the various committees of the Board met a total of 11 times. No director attended fewer than 75% of the total number of meetings of the Board and of committees of the Board on which he served during 2018. The Board has adopted a policy under which our directors are encouraged to attend our annual general meetings of shareholders. As a Singapore company, we are required to prepare annual Singapore statutory audited financial statements (our "second annual audit") and to deliver them to our shareholders in connection with our annual general meetings of shareholders. Our second annual audit can only be conducted following our first annual audit, which requires our preparation and filing of annual U.S. GAAP audited consolidated financial statements with the SEC. As a result, these multiple audits do not allow us to schedule our quarterly board meetings at the same time as our annual general meetings of shareholders and we typically hold our annual general meetings in August.

Audit Committee. Our Audit Committee held six meetings during the fiscal year ended December 31, 2018. Our Audit Committee currently has three members: Mr. Henry (Chairman) and Messrs. Miura and Rawcliffe. Our Audit Committee's role and responsibilities are set forth in the Audit Committee's written charter and include the responsibility to retain and terminate the services of our independent registered public accounting firm. In addition, the Audit Committee reviews annual financial statements, considers matters relating to accounting policy and internal controls and reviews the scope of annual audits.

Messrs. Henry, Miura and Rawcliffe satisfy the current independence standards promulgated by the SEC and by the Nasdaq Stock Market, as such standards apply specifically to members of audit committees. The Board has determined that each member of the Audit Committee meets the financial literacy requirements of the Nasdaq Stock Market Rules and that each of Messrs. Henry and Rawcliffe qualifies as an "audit committee financial expert," as the SEC has defined that term in Item 407 of Regulation S-K.

A copy of the Audit Committee's written charter is publicly available on our website at www.wavelifesciences.com.

Compensation Committee. Our Compensation Committee met three times during the fiscal year ended December 31, 2018. The Compensation Committee currently has three members: Mr. Henry (Chairman), Dr. Kolchinsky and Mr. Takanashi. Our Compensation Committee's role and responsibilities are set forth in the Compensation Committee's written charter and include reviewing, approving and making recommendations regarding our compensation policies, practices and procedures to ensure that legal and fiduciary responsibilities of the Board are carried out and that such policies, practices and procedures contribute to our success. Our Compensation Committee also administers our 2014 Equity Incentive Plan, as amended (the "2014 Equity Incentive Plan"). The Compensation Committee is responsible for determining the compensation of our executive officers.

Each member of the Compensation Committee qualifies as independent under the definition promulgated by the Nasdaq Stock Market.

A copy of the Compensation Committee's written charter is publicly available on our website at www.wavelifesciences.com.

Nominating and Corporate Governance Committee. Our Nominating and Corporate Governance Committee met two times during the fiscal year ended December 31, 2018. The Nominating and Corporate Governance Committee currently has three members: Mr. Henry (Chairman), Mr. Takanashi and Dr. Kolchinsky. The Nominating and Corporate Governance Committee's role and responsibilities are set forth in the Nominating and Corporate Governance Committee's written charter and include evaluating and making recommendations to the full Board as to the size and composition of the Board and its committees, evaluating and making recommendations as to potential candidates, and evaluating current Board members' performance.

Each member of the Nominating and Corporate Governance Committee qualifies as independent under the definition promulgated by the Nasdaq Stock Market.

The Nominating and Corporate Governance Committee is responsible for identifying individuals qualified to serve as directors, consistent with criteria approved by the Board, and recommending the persons to be nominated for election as directors, except where we are legally required by contract, law or otherwise to provide third parties with the right to nominate.

The process followed by the Nominating and Corporate Governance Committee to identify and evaluate director candidates includes making requests to Board members and others for recommendations, holding meetings from time to time to evaluate biographical information and reviewing background material relating to potential candidates and interviews of selected candidates by members of the committee and the Board. The qualifications, qualities and skills that the committee believes must be met by a committee-recommended nominee for a position on our Board are as follows:

- Nominees should have a reputation for integrity, honesty and adherence to high ethical standards.
- Nominees should have demonstrated business acumen, experience and ability to exercise sound judgments in matters that relate to the Company's current and long-term objectives and should be willing and able to contribute positively to the Company's decision-making process.
- Nominees should have a commitment to understand the Company and its industry and to regularly attend and participate in meetings of the Board and its committees.
- Nominees should have the interest and ability to understand the sometimes conflicting interests of our various constituencies, which include shareholders, employees, customers, governmental units, creditors and the general public, and to act in the interests of all shareholders.

- Nominees should not have, nor appear to have, a conflict of interest that would impair the nominee's ability to represent the interests of all
  of our shareholders and to fulfill the responsibilities of a director.
- Nominees shall not be discriminated against on the basis of race, religion, national origin, sex, sexual orientation, disability or any other basis proscribed by law. The value of diversity on the Board is considered.
- Nominees should normally be able to serve for at least five years before reaching the age of 70.

The Nominating and Corporate Governance Committee considers issues of diversity among its members in identifying and considering nominees for director, and strives where appropriate to achieve a diverse balance of backgrounds, perspectives, experience, age, gender, ethnicity and country of citizenship on the Board and its committees. The value of many forms of diversity has been incorporated into our board appointments to date, and our current board represents diversity of thought, background, and experience, as well as diversity of personal characteristics such as ethnicity and age.

A copy of the Nominating and Corporate Governance Committee's written charter is publicly available on our website at www.wavelifesciences.com.

#### **Procedures by which Shareholders may Nominate Directors**

The Nominating and Corporate Governance Committee shall review and evaluate information available to it regarding candidates proposed by shareholders and shall apply the same criteria and shall follow substantially the same process in considering them as it does in considering other candidates. The factors generally considered by the Nominating and Corporate Governance Committee are set out in our Corporate Governance Guidelines, which are publicly available on the "For Investors & Media" section of our website at http://ir.wavelifesciences.com/ under the heading "Corporate Governance." If a shareholder wishes to nominate a candidate to be considered by the Nominating and Corporate Governance Committee for election as a director at our Annual General Meeting of Shareholders, it must give timely notice of the nomination in writing to our General Counsel not less than 45 days prior to the date that is one year from the date on which we first mail our proxy statement relating to our upcoming Annual General Meeting of Shareholders. All shareholder proposals should be marked for the attention of General Counsel, Wave Life Sciences Ltd., 733 Concord Avenue, Cambridge, MA 02138.

#### **Compensation Committee Interlocks and Insider Participation**

During 2018, the members of our Compensation Committee were Dr. Kolchinsky and Messrs. Henry and Takanashi. Dr. Kolchinsky is the managing member of RA Capital Management, LLC, the general partner of RA Capital Healthcare Fund, L.P., one of our shareholders. Mr. Takanashi is a director and executive officer of Shin Nippon Biomedical Laboratories Ltd. and its affiliates, one of our shareholders. We have entered into certain transactions with affiliates of RA Capital Healthcare Fund, L.P. and Shin Nippon Biomedical Laboratories Ltd., as further described under "Certain Relationships and Related Person Transactions" below.

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

#### **Familial Relationships**

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

#### **Board Leadership Structure and Role in Risk Oversight**

The positions of Chairman of the Board and Chief Executive Officer are presently separated at the Company. We believe that separating these positions allows our Chief Executive Officer to focus on our day-to-day business, while allowing our Chairman of the Board to lead the Board in its fundamental role of providing advice to, and independent oversight of, management. Our Board recognizes the time, effort and energy that the Chief Executive Officer is required to devote to his position in the current business environment, as well as the commitment required to serve as our Chairman, particularly as the Board's oversight responsibilities continue to grow. Our Board also believes that this structure ensures a greater role for the independent directors in the oversight of our Company and active participation of the independent directors in setting agendas and establishing priorities and procedures for the work of our Board. The Board retains the authority to modify this leadership structure as and when appropriate to best address the Company's unique circumstances at any given time and to serve the best interests of our shareholders.

Our Board oversees the risk management activities designed and implemented by our management. Our Board executes its oversight responsibility for risk management both directly and through its committees. Our Board also considers specific risk topics, including risks associated with our strategic plan, business operations and capital structure. In addition, our Board receives detailed regular reports from members of our management team and other personnel that include assessments and potential mitigation of the risks and exposures involved with their respective areas of responsibility. Our Board may delegate to the Audit Committee oversight of our risk management process. Our other Board committees will also consider and address risk as they perform their respective committee responsibilities. Specifically, the Audit Committee receives regular reports from members of senior management on areas of material risk to the Company, including operational, financial, legal, regulatory, strategic and reputational risks. As part of its charter, our Audit Committee regularly discusses with management our major risk exposures, their potential financial impact on our Company and the steps we take to manage them. Our Compensation Committee assists the Board in fulfilling its oversight responsibilities with respect to the management and risks arising from our compensation policies and programs. Our Nominating and Corporate Governance Committee assists the Board in fulfilling its oversight responsibilities with respect to the management of risks associated with Board organization, membership and structure, succession planning for our directors and executive officers and corporate governance. All committees report to the full Board as appropriate, including when a matter rises to the level of a material or enterprise level risk.

#### **Shareholder Communications to the Board**

Generally, shareholders who have questions or concerns or who wish to address questions regarding our business directly with the Board, or any individual director, should direct his or her questions in writing to IR@wavelifesci.com. Communications will be distributed to the Board, or to any individual director or directors as appropriate, depending on the facts and circumstances outlined in the communications. Items that are unrelated to the duties and responsibilities of the Board may be excluded, such as junk mail and mass mailings, resumes and other forms of job inquiries, surveys and solicitations or advertisements. In addition, any material that is unduly hostile, threatening, or illegal in nature may be excluded, provided that any communication that is filtered out will be made available to any outside director upon request.

#### **Executive Officers**

Set forth below is information as of April 1, 2019 regarding our executive officers who are not also directors. We have employment agreements with certain of our executive officers and all of our executive officers are at-will employees.

<u>Name</u>	Age Title
Christopher Francis, Ph.D.	41 Senior Vice President, Corporate Development, Head of Emerging Areas
Michael Panzara, M.D., MPH	52 Chief Medical Officer
Keith C. Regnante	49 Chief Financial Officer
Chandra Vargeese, Ph.D.	57 Senior Vice President, Drug Discovery

Christopher Francis, Ph.D. has served as our Senior Vice President, Corporate Development, Head of Emerging Areas since May 2017. During the period January 2017 to May 2017, Dr. Francis served as our Senior Vice President, Corporate Development & Portfolio Management. Prior to that, Dr. Francis served as our Vice President, Head of Business Development since April 2014. Prior to joining us, Dr. Francis held senior operational, strategic and business development roles within GlaxoSmithKline Oncology from 2009 to 2014 and was a member of the team that established GlaxoSmithKline's Rare Disease Unit. Before GlaxoSmithKline, Dr. Francis was a health care private equity associate at Two River LLC from 2008 to 2009. He began his career in pharmaceutical pricing and reimbursement consulting at IMS Health. Dr. Francis earned undergraduate and graduate degrees in Biochemistry and Molecular Biology from the University of Melbourne and was a doctoral research associate at the University of Cambridge.

Michael Panzara, M.D., MPH has served as our Chief Medical Officer since November 2018. During the period July 2016 to October 2018, Dr. Panzara served as our Franchise Lead, Neurology. Prior to joining us, Dr. Panzara served in various roles at Sanofi Genzyme (and Genzyme Corporation before its merger with Sanofi in 2011) from 2009 to July 2016, most recently serving as Head of the Multiple Sclerosis, Neurology and Ophthalmology Therapeutic Area for Global Development and prior to that, serving as Group Vice President, Therapeutic Area Head, Multiple Sclerosis and Neurology. Prior to joining Genzyme, Dr. Panzara served in roles of increasing responsibility at Biogen, including Vice President, Chief Medical Officer, Neurology from 2006 to 2009 and in various roles in the Medical Research group from 2001 to 2006. In addition, from 1999 to 2011, Dr. Panzara was an Instructor in Neurology at Harvard Medical School and an Assistant in Neurology at Massachusetts General Hospital (MGH). He trained in neurology at MGH from 1994 to 1998, and completed his post-doctoral training in immunology and rheumatology at Brigham and Women's Hospital. Dr. Panzara holds a bachelor's degree from the University of Pennsylvania, a medical degree from Stanford University School of Medicine, and a master's degree in public health from the Harvard School of Public Health.

**Keith C. Regnante** has served as our Chief Financial Officer since August 2016. Prior to joining us, from February 2014 to August 2016, Mr. Regnante served as Vice President of Finance at Shire Pharmaceuticals, a global biopharmaceutical company. Mr. Regnante also served on the Financial Leadership Team and the R&D Leadership Team while he was at Shire. From September 2013 to February 2014, he served as Head of R&D Finance for ARIAD Pharmaceuticals, Inc. From January 1999 to August 2013, Mr. Regnante held multiple positions within finance for Biogen Inc., including Senior Director of Corporate Finance from 2011 to 2013, Senior Director of Worldwide R&D Finance from 2008 to 2011, and several other positions dating back to 1999. Prior to joining finance organizations for biotechnology companies, Mr. Regnante worked as a consultant at The Boston Consulting Group. He holds a B.A. in Economics from Tufts University and an M.B.A. from the MIT Sloan School of Management.

*Chandra Vargeese, Ph.D.* has served as our Senior Vice President, Head of Drug Discovery since August 2014. Before joining us, Dr. Vargeese served as Novartis' Executive Director and Head of RNA Chemistry and Delivery, a position she held from 2008 to 2014. Prior to joining Novartis, Dr. Vargeese led siRNA delivery in

the RNA Therapeutics division at Merck & Co., where she served as Senior Director and Head of RNA Chemistry and Delivery. Dr. Vargeese joined Merck through its acquisition of Sirna Therapeutics, where she was Vice President of Chemistry. Before Sirna, Dr. Vargeese served as Associate Director of Chemistry at NeXstar Pharmaceuticals and is the co-inventor of Macugen (pegaptanib), an approved therapy for treating wet AMD. Dr. Vargeese earned a Ph.D. in Organic Chemistry at the Indian Institute of Science, Bangalore, India and completed post-doctoral work at the University of Rhode Island.

## SECTION 16(A) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Our records reflect that all reports that were required to be filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, as amended, were filed on a timely basis.

#### CODE OF BUSINESS CONDUCT AND ETHICS

We have adopted a code of business conduct and ethics that applies to all of our employees. The text of the code of conduct and ethics is posted on our website at www.wavelifesciences.com. Disclosure regarding any amendments to, or waivers from, provisions of the code of conduct and ethics that apply to our directors, principal executive officer or principal financial officer will be included in a Current Report on Form 8-K filed with the SEC within four business days following the date of the amendment or waiver, unless website posting or the issuance of a press release of such amendments or waivers is then permitted by the rules of the Nasdaq Stock Market.

#### Item 11. Executive Compensation.

#### **COMPENSATION DISCUSSION AND ANALYSIS**

#### Introduction

In the paragraphs that follow, we have provided an overview and analysis of our compensation program and policies, the material compensation decisions we have made under those programs and policies, and the material factors that we considered in making those decisions. Following this section, you will find a series of tables containing specific information about the compensation earned or paid in fiscal 2018 to the following executive officers, who we will refer to throughout this Amendment as our "named executive officers" or "NEOs":

Name Principal Position

Paul B. Bolno, M.D., MBA President and Chief Executive Officer

Keith C. Regnante Chief Financial Officer

Christopher Francis, Ph.D. Senior Vice President, Corporate Development, Head of Emerging Areas

Michael Panzara, M.D., MPH Chief Medical Officer

Chandra Vargeese, Ph.D. Senior Vice President, Drug Discovery

We became a public company in November 2015, and we have filed with the SEC since that date under the scaled reporting rules applicable to emerging growth companies. As of December 31, 2018, we are no longer an emerging growth company and therefore, this year's executive compensation disclosure includes additional information regarding executive compensation that was not included last year, including:

- This Compensation Discussion and Analysis ("CD&A");
- Two additional executive officers listed as named executive officers;
- An additional year of reporting history in our Summary Compensation Table;
- Additional compensation disclosure tables for "Grants of Plan-Based Awards," "Option Exercises and Stock Vested," and "Potential Payments
  upon Termination or Change in Control," which are included in this section;
- An advisory vote on "say on pay" for executive compensation, which will be included in our proxy statement; and
- An advisory vote on the frequency on which we will hold our "say on pay" vote, which will be included in our proxy statement.

#### Executive Compensation Philosophy

Our Compensation Committee regularly reviews the elements of the individual compensation packages for our Chief Executive Officer and our other executive officers to achieve the following primary objectives:

- Attract, retain and motivate superior executive talent;
- Provide incentives that reward the achievement of performance goals that directly correlate to the enhancement of shareholder value, as well as to facilitate executive retention; and
- Align our executive officers' interests with those of our shareholders through long-term incentives linked to specific performance.

We aim for simplicity in our compensation program so that it is easy for our employees and our shareholders to understand the various components of our compensation program and the incentives designed to drive Company performance. The three key components of our executive compensation program are base salary, annual cash performance-based incentives and equity-based long-term incentive awards.

#### 2018 Business Highlights

2018 was an important year for Wave, as we continued to build upon our discovery, development and manufacturing capabilities and continued our transformation to become a fully integrated genetic medicines company aspiring to deliver best-in-class medicines. Highlights of our accomplishments and milestones that informed our executive compensation decisions are described below.

Clinical trial and regulatory advancements: In August 2018, we initiated our multi-dose open-label extension ("OLE") of our Phase 1 trial of suvodirsen, pursuant to which patients in the OLE are undergoing quarterly clinical assessments using validated clinical outcome measures and are having muscle biopsies taken so that an interim analysis may be conducted by measuring dystrophin expression using a standardized Western blot. In December 2018, we announced that the safety and tolerability data from the suvodirsen Phase 1 clinical trial in boys with DMD who are amenable to exon 51 skipping support the initiation of a Phase 2/3 efficacy and safety clinical trial. At year-end 2018, the planned Phase 2/3 trial for suvodirsen was selected for the U.S. Food and Drug Administration ("FDA") pilot program for complex innovative trial designs ("CID"), which marked the first time that the FDA had selected clinical protocols for its CID pilot program that was announced in August 2018. In HD, we continued to enroll patients in the PRECISION-HD program, which consists of two global Phase 1b/2a clinical trials evaluating investigational therapies WVE-120101 and WVE-120102, and we successfully completed and reported the results of our observational research study of approximately 200 HD patients in the United States to determine whether such patients were heterozygous for one or both of two SNPs (rs362307 (SNP1) or rs362331 (SNP2)), and if the SNP is on the same allele as their pathogenic CAG repeat expansion.

*Pipeline and program development:* During 2018, we leveraged significant learnings from our ongoing DMD discovery and development efforts to identify and advance WVE-N531 and related back-ups, our preclinical program to target DMD in boys amenable to exon 53 skipping. Throughout 2018, we made significant progress in expanding our DMD discovery programs to explore additional exon targets beyond our current exon 51 and exon 53 skipping programs, including exons 44, 45, 52, 54 and 55. In October 2018, we announced our plans to design and advance stereopure oligonucleotide therapeutics for the potential treatment of inherited retinal diseases and announced that our research is initially focused on retinitis pigmentosa due to a P23H mutation in the RHO gene, Stargardt disease, Usher syndrome type 2A and Leber congenital amaurosis 10. In addition, during 2018, we established high throughput screening of our stereopure oligonucleotides.

Strategic collaborations: In February 2018, we entered into a global strategic collaboration with Takeda Pharmaceutical Company Limited to collaborate on the research, development and commercialization of oligonucleotide therapeutics for disorders of the central nervous system (the "Takeda Collaboration"), which provides Wave with an aggregate of at least \$230.0 million in committed cash. In April 2018, the Takeda Collaboration became effective and Takeda paid Wave \$110.0 million as an upfront payment and paid \$60.0 million to purchase Wave shares at the then-market price. Takeda also agreed to fund Wave's research and preclinical activities in the amount of \$60.0 million during the four-year research term and to reimburse Wave for any collaboration-budgeted research and preclinical expenses incurred by Wave that exceed that amount. In 2018, we continued our progress under our collaboration with Pfizer that we commenced in May 2016 and we are advancing Pfizer's named 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.

Finance and operations: We ended 2018 in a strong financial position with \$174.8 million in cash and cash equivalents. During 2018, we completed the buildout of our Lexington, Massachusetts facility, transitioned approximately 100 employees to that facility, and began producing clinical material in the GMP manufacturing suite there. We have also established and continue to enhance our internal current good manufacturing practices manufacturing capabilities to increase control and visibility of our drug substance supply chain. We continued strengthening our intellectual property position and as of February 1, 2019, our portfolio included at least 18 issued U.S. patents, at least 40 issued foreign patents, and pending applications in at least 37 jurisdictions. During 2018, we hired approximately 82 new employees and integrated them across all of our functional areas. In addition, we achieved an approximate 20% total shareholder return for investors during 2018.

Roles and Responsibilities in the Decision-making Process

#### Role of the Compensation Committee

Pursuant to its charter, our Compensation Committee creates the policies that govern base salary, annual cash performance-based incentives, our long-term incentive program and other compensation and benefits for our executive officers. Our Compensation Committee also oversees various executive and employee compensation plans and programs and is responsible for monitoring these plans and programs to confirm that they adhere to our compensation philosophy and objectives. Our Compensation Committee determines the appropriate compensation levels for our executive officers, evaluates officer and director compensation plans, policies and programs, and reviews benefit plans for our executive officers. Our Compensation Committee believes that the total compensation paid to our executive officers should be fair, reasonable and competitive, and that a significant portion of the total compensation should be tied to our Company's annual and long-term performance. Each year, our Compensation Committee reviews and discusses our executive officers' proposed compensation with the Chief Executive Officer for all executives other than the Chief Executive Officer. The Chief Executive Officer's compensation is determined solely by the Compensation Committee.

#### Role of Management

Our Compensation Committee works with members of our management, including our Chief Executive Officer (except with respect to his own compensation), and our human resources, finance and legal professionals. Typically, our management assists the Compensation Committee by providing information on corporate and individual performance and management's perspective and recommendations on compensation matters for each executive officer. Our Chief Executive Officer provides recommendations to the Compensation Committee regarding most compensation matters, including executive compensation and our annual and long-term incentive programs. However, the Compensation Committee does not delegate any of its functions to others in setting the compensation of our NEOs.

#### Role of Compensation Consultant

Our Compensation Committee has the authority to retain the services and obtain the advice of external advisors, including compensation consultants, legal counsel and other advisors to assist in the evaluation of executive officer compensation. Our Compensation Committee engaged Radford, a business unit of AON Plc and an independent executive compensation consulting firm ("Radford"), to review our executive compensation policies and practices and to conduct an executive compensation market analysis.

For 2018, Radford reviewed and advised on all principal aspects of our executive compensation program, including:

- Assisting in developing a peer group of publicly traded companies to be used to help assess executive compensation;
- Assisting in developing a competitive compensation strategy and consistent executive compensation assessment practices relevant to a public
  company, including review and recommendation of the annual performance-based cash incentive program as well as the equity strategy for the
  Company covering dilution, grant levels and type of equity; and
- Meeting regularly with the Compensation Committee to review all elements of executive compensation including the competitiveness of the executive compensation program against approved peer companies.

Our Compensation Committee has assessed the independence of Radford consistent with the Nasdaq Stock Market listing requirements and has concluded that the engagement of Radford does not raise any conflicts of interest.

#### Peer Companies and Use of Market Data

In determining market competitiveness of executive officer compensation, our Compensation Committee, with the assistance of its independent compensation consultant, Radford, evaluates the market competitiveness of

compensation for each of our executive officers in order to guide target compensation decisions for the coming year. Our Compensation Committee references a peer group of publicly traded companies in the biopharmaceutical industry for purposes of gathering data to compare with our existing executive compensation levels and practices and as context for future compensation decisions. Our Compensation Committee reviews and updates the compensation peer group each year, as appropriate, to include companies that the Compensation Committee believes are competitors for executive talent and that are similar to us in terms of their stage of development, market capitalization, number of employees, business focus, structure, financial profile and geographic proximity to the Cambridge biotech cluster, as applicable. We also recognize that it is unlikely for companies to align equally on all factors, so we consider companies that meet a majority of the criteria. Due to the nature of our business, we compete for executive talent with many companies much larger than we are. Our Compensation Committee considers peer group and other industry compensation data and the recommendations of our compensation consultant when making decisions related to executive compensation, ultimately giving consideration to the competitiveness of our compensation program, internal perceptions of equity and individual performance and role.

Our peer group for 2018 consisted of the following 19 companies that were selected among publicly traded biopharmaceutical companies:

- · Aduro BioTech, Inc.
- Arbutus Biopharma Corporation
- Arrowhead Pharmaceuticals, Inc.
- Audentes Therapeutics, Inc.
- · AveXis, Inc.
- Bellicum Pharmaceuticals, Inc.
- Blueprint Medicines Corp.
- CytomX Therapeutics, Inc.
- Editas Medicine, Inc.
- · Epizyme, Inc.

- Idera Pharmaceuticals, Inc.
- Intellia Therapeutics, Inc.
- REGENXBIO, Inc.
- Sangamo Therapeutics, Inc.
- Sarepta Therapeutics, Inc.
- Spark Therapeutics, Inc.
- Voyager Therapeutics, Inc.
- · Xencor, Inc.
- ZIOPHARM Oncology, Inc.

Our Compensation Committee finds comparative data from our peer group to be useful in setting and adjusting executive compensation, but it does not target our programs or any particular element of compensation to be at or within a particular percentile or range compared to our peers. Our Compensation Committee uses the peer group data primarily to ensure that our executive compensation program and its constituent elements are and remain competitive in relation to our peers, and applies judgment and discretion in establishing targeted compensation levels taking into account not only competitive market data but also the experience of the executive, scope of responsibility, critical skill sets and expertise.

## Components of Executive Compensation

The primary elements of our executive compensation program are:

- Base salary;
- Annual performance-based cash incentive compensation; and
- Long-term equity incentive awards.

We also provide broad-based health and welfare benefits and have certain severance and change-in-control benefits. Our intention is to structure these components of our executive compensation program in a way that

achieves the objectives of the program of linking and emphasizing pay to performance over both the short- and long-term, aligning executives' interests with the interests of shareholders and attracting, motivating and retaining highly skilled and experienced executives.

#### Base Salary

Annual base salary is designed to provide a competitive fixed rate of pay, recognizing different levels of responsibility and performance. Actual salaries reflect the judgment and consideration of numerous factors by the Compensation Committee. These factors include the NEO's experience, importance of position, performance, comparative survey data, internal pay equity, scope of responsibilities, expertise, the criticality of the NEO's position within the Company, the other elements of compensation received by the NEO, and the NEO's compensation in comparison to similarly situated executive officers at comparable companies in our peer group. The salary increases for 2018 for all of our NEOs were made to ensure better alignment with market data and in consideration of internal pay equity.

The following were the annual base salaries of our NEOs in effect for 2017 and 2018:

	2017	2018	
<u>Name</u>	Base Salary	Base Salary	% Increase
Paul B. Bolno	\$ 515,300	\$ 541,100	5%
Keith C. Regnante	\$ 327,400	\$ 350,000	7%
Christopher Francis	\$ 330,000	\$ 363,000	10%
Michael Panzara	\$ 417,800	\$ 430,300	3%
Chandra Vargeese	\$ 350,000	\$ 400,000	14%

#### Annual Performance-Based Cash Incentive Compensation

The Compensation Committee believes that, in order to reward performance and overall Company success, a portion of an executive officer's compensation should be tied to the achievement of the Company's goals in the form of an annual cash incentive payment. Our executive officers are eligible to receive annual cash incentive awards, with the target bonus opportunity determined as a percentage of their base salary. We established this program in order to focus and incentivize our executives to achieve short-term strategic business objectives.

For 2018, the target bonus opportunity for each NEO was the same as for 2017, except for Dr. Bolno whose target percentage was increased from 50% to 55% to align his bonus opportunity with similarly situated CEOs.

At the beginning of 2018, our Board approved corporate goals and objectives that our Compensation Committee then used to design our annual incentive compensation program for 2018. Under this program, the Compensation Committee established corporate goals that would apply uniformly to all of our executive officers. For the reasons set forth under "2018 Business Highlights" above, we believe that 2018 was a successful year for Wave as we continued to make significant progress in advancing our pipeline. Our 2018 corporate goals that were assessed to determine the achievement of our corporate performance were as follows:

- Execute on our six development programs to meet our publicly disclosed timelines;
- Deliver two candidate selection packages, at least one in neurology, to extend pipeline;
- Execute on Chemistry, Manufacturing and Controls (CMC) project plans to meet publicly disclosed timelines on our three clinical programs;
- Invest in and enhance PRISM through technology innovation to establish fundamental new understandings to optimize our drug development capabilities;
- Establish fully integrated oligonucleotide chemistry facility spanning small scale synthesis through commercial process development;

- Formalize our strategic relationships with key scientific centers of excellence;
- · Continue to attract, develop, and retain top talent, while maintaining culture and achieving growth management objectives;
- Enhance the breadth and effectiveness of internal and external communications to drive understanding of our strategy and culture; and
- Deliver 2018 corporate goals within 2018 budget.

Our Board reviewed the Company's achievement of our 2018 corporate goals and determined that achievement was at 102%. The Compensation Committee then determined that bonuses for 2018 performance be paid to our named executive officers based on these results. In early 2019, our CEO and other NEOs were awarded their incentive payouts in connection with meeting the 2018 corporate goals at 102% of their incentive target amount. The following table sets forth the cash bonus payments for 2018 performance:

	Incentive Target Amount		
<u>Name</u>	(as a % of Base Salary)	Ac	tual Award
Paul B. Bolno	55%	\$	303,557
Keith C. Regnante	40%	\$	142,800
Christopher Francis	35%	\$	129,591
Michael Panzara	40%	\$	175,562
Chandra Vargeese	40%	\$	163,200

#### Long-Term Incentive Compensation

We have a broad-based equity compensation program designed to reward and motivate our employees, including our NEOs. Equity awards help align the interests of our NEOs and other employees with the long-term interests of our shareholders and provide an opportunity for employees to acquire an ownership interest in the Company. The granting of equity awards is also consistent with our compensation philosophy of attracting, retaining and motivating our NEOs to deliver sustainable long-term value and aligning the interests of our executives with those of our shareholders. In determining the size and type of equity awards to grant, our Compensation Committee considered evolving market practices, as well as the retentive value provided by our equity grants.

Our 2014 Equity Incentive Plan, which we adopted prior to our initial public offering, was amended in August 2017 following shareholder approval of the 2014 Equity Incentive Plan at our 2017 Annual General Meeting. The plan allows for the grant of options, restricted share awards, restricted share unit awards (RSUs), other share or cash-based awards and dividend equivalent awards to employees, non-employee directors and consultants.

Since Wave became a public company in November 2015, we have provided annual long-term incentive awards to our executive officers as follows:

- 2016 LTIP grants were made 100% in share options vesting over a four-year period with 25% vesting on the first anniversary of the date of grant and the remainder vesting monthly over the next three years;
- 2017 LTIP grants were made at approximately 67% in share options that vest over a four-year period with 25% vesting on February 15, 2018 and the remainder vesting monthly over the next three years; and approximately 33% in RSUs that vest annually in equal installments of 25% over a four-year period beginning on February 15, 2018; and
- 2018 LTIP grants were made at approximately 67% in share options that vest over a four-year period with 25% vesting on February 15, 2019 and the remainder vesting quarterly over the next three years; and approximately 33% in RSUs that vest annually in equal installments of 25% over a four-year period beginning on February 15, 2019.

In 2017, we changed the mix of the number of awards to be granted to more than one type of award to combine the retention and downside risk benefits inherent in RSUs with the shareholder-value-creation benefits inherent in share options, while mitigating the potential risk that may manifest itself through using a single type of award. Option awards produce value only if the price of the underlying ordinary shares appreciates, and then only to the extent of the excess of its share price over the exercise price of the option. Options are granted with an exercise price equal to the fair market value of the Company's ordinary shares on the date of grant. Because our equity awards vest incrementally over time, they create an incentive for executives to continue their employment with the Company for extended periods after grant.

In determining the annual equity awards to be granted to our named executive officers in 2018, our Compensation Committee considered, among other things, the value of the annual equity awards received by executives in our compensation peer group and our industry and the size of the annual equity awards as a percentage of our outstanding shares, dilution to existing shareholders and the retention value in the outstanding equity program based on the value of outstanding unvested awards. To promote our performance-based compensation philosophy, individual equity awards were positioned higher or lower within the compensation peer group range based on the individual performance of each named executive officer.

For the details regarding our 2018 equity awards see the "Grant of Plan-Based Awards" table below.

#### **Employee Benefits and Perquisites**

Benefits offered to our named executive officers serve a different purpose than do the other elements of total compensation. In general, they are designed to provide a safety net of protection against the financial catastrophes that can result from illness, disability or death and provide for some benefits upon retirement. Benefits offered to our NEOs are the same as those offered to the general employee population, except for the car service provided to our CEO, which is reflected in the "all other compensation" column in the summary compensation table below. The Compensation Committee determined it is in the best interest of the Company to provide car service for our CEO in order to promote the efficient use of his work time for the Company and to provide safe transportation given the demands of his role, which often require the participation on conference calls during commuting hours as well as extended work hours.

We maintain a 401(k) plan that is intended to qualify under Section 401(k) of the Internal Revenue Service Code of 1986, as amended. In general, all of our employees, including our named executive officers, are eligible to participate in the 401(k) plan. Under the 401(k) plan, employees may elect to reduce their current compensation by up to the statutorily prescribed annual limit, equal to \$18,500 in 2018, and to have the amount of such reduction contributed to the 401(k) plan. We currently match 50% of an employee's 401(k) contributions up to a maximum of 6% of the participant's compensation. Matching contributions are 100% vested upon completion of one year of service with the Company. In addition, employees who turn age 50 before the end of any calendar year may also defer up to an additional \$6,000, and these catch-up contributions are eligible for matching contributions. Matching contributions made to each of our named executive officers are included in the "Summary Compensation Table" below.

## Employment Agreements and Severance Benefits

Each of our named executive officers entered into an employment agreement or offer letter with the Company in connection with the commencement of his or her employment. All employment agreements and offer letters generally provide for at-will employment and that our named executive officers are eligible to participate in employee benefit plans of general applicability to other employees, which we maintain from time to time. Dr. Bolno's employment agreement, which was entered into while we were still a private company, provides for continued payment of his base salary for 12 months if he is terminated by the Company without cause. Drs. Francis and Vargeese offer letters, which were entered into while we were still a private company, do not provide

for any severance arrangements with the Company. Each of Dr. Panzara and Mr. Regnante, who joined the Company after our initial public offering, entered into an employment agreement with the Company that provides if he is involuntarily terminated by the Company without cause or he terminates his employment for good reason, he will be entitled to receive continued payment of his base salary for 12 months following termination, continued payment of health insurance premiums at the Company's then normal rate of contribution until the earlier of 12 months following termination or until he commences new employment. In addition, if a change of control occurs and within one year following the change of control, Dr. Panzara or Mr. Regnante is involuntarily terminated without cause or terminates his employment for good reason, he will be entitled to receive a lump sum cash payment equal to 12 months of his then-current annual base salary; the payment of a separation bonus equal to his then annual target bonus opportunity, prorated through his termination date; and continued payment of health insurance premiums at the Company's then normal rate of contribution until the earlier of 12 months following the termination date or until he commences new employment.

In addition, as a condition of their employment, each of our named executive officers has entered into a non-competition and non-solicitation agreement pursuant to which he or she has agreed not to compete with us nor hire our employees for a period of 12 months following the termination of his or her employment.

The equity agreements with each of Drs. Bolno, Francis, Panzara, and Vargeese and Mr. Regnante that were entered into on or before December 31, 2017 provide that all unvested shares underlying outstanding options and restricted share units will become fully vested upon a change of control. The Compensation Committee determined that commencing in 2018 future equity agreements with our NEOs would provide for "double trigger" vesting upon a change of control meaning that all unvested shares underlying outstanding options and restricted share units granted after December 31, 2017 will become fully vested upon termination without cause or for good reason within 12 months following a change of control. We have not provided any excise tax gross-ups to any of our NEOs in the event of a change of control.

#### Policy Against Anti-Hedging and Pledging

We maintain an Insider Trading Policy that, among other things, prohibits all officers, including our named executive officers, directors and employees from engaging in "hedging" transactions with respect to our ordinary shares. This includes short sales, hedging of share ownership positions, and transactions involving derivative securities relating to our ordinary shares. In addition, they are also prohibited from pledging of the Company's securities as collateral for a loan; provided, however, that (i) any pledge arrangement which existed prior to the adoption of the Company's Insider Trading Policy in connection with its initial public offering, was grandfathered and need not be unwound solely due to the adoption of this policy; and (ii) exceptions may be granted for pledge arrangements where Company personnel wish to pledge the Company's securities as collateral for a loan (other than a margin loan) and can demonstrate the financial wherewithal to repay the loan without having to resort to the pledged securities.

#### Risk Analysis of Our Compensation Plans

Our management assesses and discusses with our Compensation Committee our compensation policies and practices for our employees as they relate to our risk management. Based on this assessment, we do not believe that any risks arise from such policies and practices that are reasonably likely to have a material adverse effect on us now or in the future.

#### Recent Executive Compensation Actions

In the first quarter of 2019, our Compensation Committee approved salary increases and 2019 target bonus percentages effective as of January 1, 2019. In addition, our Compensation Committee approved 2019 long-term incentive plan awards for our named executive officers for purposes of retention, to recognize sustained long-term performance, and to incentivize achievement of future, multi-year objectives. These actions of our Compensation Committee are summarized below:

	2019 Base	2019 Target Bonus (as a % of Base	Number of Shares Subject to Time- Based Restricted	Number of Shares Subject to Performance-Based Restricted
<u>Name</u>	Salary	Salary)	Share Unit Award	Share Unit Award
Paul B. Bolno	\$578,977	65%	60,000	185,000
Keith C. Regnante	\$362,250	40%	13,500	40,000
Christopher Francis	\$375,705	40%	13,500	65,000
Michael Panzara	\$451,815	40%	15,000	100,000
Chandra Vargeese	\$426,000	40%	15,000	100,000

As shown in the table above, in 2019 we determined not to grant options and instead added performance-based restricted share units to the mix of grants for our NEOs, in addition to the continued grant of time-based RSUs. The time-based RSUs will vest as in previous years on an annual basis over a four-year period, subject to continuous service. The performance-based RSUs vest based on two separate performance metrics, 80% of the award will vest upon receipt of the first regulatory approval of a Wave drug product by the U.S. Food and Drug Administration or European Medicines Agency and 20% of the award will vest upon the first commercial sale of a Wave drug product, in each case, occurring within 10 years of the grant date.

#### **COMPENSATION COMMITTEE REPORT**

The Compensation Committee of our Board of Directors has reviewed and discussed the Compensation Discussion and Analysis required by Item 402(b) of Regulation S-K, which appears above in Item 11 of this Amendment, with our management. Based on this review and discussion, the Compensation Committee has recommended to our Board that the Compensation Discussion and Analysis be included in this Amendment.

Members of the Wave Life Sciences Ltd. Compensation Committee: Christian Henry (Chairman) Peter Kolchinsky Ken Takanashi

#### **EXECUTIVE COMPENSATION**

#### **Summary Compensation Table**

The following table shows the total compensation paid or accrued during the last three fiscal years ended December 31, 2018, 2017 and 2016 to our President and Chief Executive Officer, our Chief Financial Officer and our three next most highly compensated executive officers who earned more than \$100,000 during the fiscal year ended December 31, 2018 and were serving as executive officers as of such date.

ar in the se		Salary	Bonus	Share Awards	Option Awards	Non-Equity Incentive Plan Compensation	All Other Compensation	T . 1 (f)
Name and Principal Position	Year	(\$)	(\$)	(\$)(1)	(\$)(2)	(\$)	(\$)(3)	Total (\$)
Paul B. Bolno, M.D., MBA	2018	541,100	_	2,182,725	2,802,601	303,557	9,983	5,839,966
President and Chief Executive Officer	2017	515,300	_	1,054,515	1,342,902	283,400	528	3,196,645
	2016	490,000	329,000	_	2,505,377	245,000	25,486	3,594,863
Keith C. Regnante	2018	350,000		520,650	668,510	142,800	9,060	1,691,020
Chief Financial Officer	2017	327,400		124,915	159,296	144,100	6,136	761,847
	2016	120,000		_	1,470,919	48,300	331	1,639,550
Christopher Francis, Ph.D.	2018	363,000	_	520,650	668,510	129,591	540	1,682,291
Senior Vice President, Corporate Development, Head								
of Emerging Areas	2017	330,000	_	284,690	361,194	127,100	528	1,103,512
Michael Panzara, M.D., MPH	2018	430,300		700,875	899,918	175,562	9,492	2,216,147
Chief Medical Officer	2017	417,800		200,445	255,614	183,800	9,342	1,067,001
	2016	193,534	55,000	493,448	1,857,366	162,200	496	2,762,044
Chandra Vargeese, Ph.D.	2018	400,000	_	700,875	899,918	163,200	10,572	2,174,565
Senior Vice President, Drug Discovery	2017	350,000	_	284,690	361,194	154,000	7,380	1,157,264

<sup>(1)</sup> Amount represents the aggregate grant date fair value for the share awards identified, computed in accordance with FASB ASC Topic 718. A discussion of the assumptions used in determining grant date fair value may be found in Note 7 to the financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2018.

<sup>(2)</sup> Amounts represent the aggregate grant date fair value for the option awards identified, computed in accordance with FASB ASC Topic 718. A discussion of the assumptions used in determining grant date fair value may be found in Note 7 to the financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2018.

<sup>(3)</sup> Amounts include 401(k) matching contributions made to Mr. Regnante and Drs. Panzara and Vargeese and the value of annual premiums paid by us with respect to a life insurance policy for the benefit of each of the named executive officers. For 2018, amounts for Dr. Bolno also include reimbursement of commuting expenses of \$7,607 and the related tax gross up of \$1,836. For 2016, amounts for Dr. Bolno also include reimbursement of relocation expenses of \$15,461 and the related tax gross up of \$8,500 as well as certain commuting expenses.

#### 2018 Fiscal Year Grants of Plan-Based Awards

The following table shows information regarding grants of non-equity incentive plan awards and grants of equity awards that we made during the fiscal year ended December 31, 2018 to each of our executive officers named in the Summary Compensation Table.

Name	Grant Date	Estimated Future Payouts Under Non-Equity Incentive Plan Awards: Target (\$)(1)	All Other Share Awards: Number of Shares or Units (#)(2)	All Other Option Awards: Number of Securities Underlying Options (#)(3)	Bas Opti	ercise or e Price of on Awards Share)(4)	Grant Date Fair Value of Share and Option Awards (\$/Share)(5)
Paul B. Bolno, M.D., MBA		297,605					
	1/23/2018	_	54,500	_		_	2,182,725
	1/23/2018	_	_	109,000	\$	40.05	2,802,601
Keith C. Regnante	_	140,000	_	_		_	_
	1/23/2018	_	13,000	_		_	520,650
	1/23/2018	_	_	26,000	\$	40.05	668,510
Christopher Francis, Ph.D.	_	127,050	_	_		_	_
	1/23/2018	_	13,000	_		_	520,650
	1/23/2018	_	_	26,000	\$	40.05	668,510
Michael Panzara, M.D., MPH	_	172,120	_	_		_	_
	1/23/2018	_	17,500	_		_	700,875
	1/23/2018	_	_	35,000	\$	40.05	899,918
Chandra Vargeese, Ph.D.	_	160,000	_	_		_	_
	1/23/2018	_	17,500	_		_	700,875
	1/23/2018	_	_	35,000	\$	40.05	899,918

- (1) Represents the potential 2018 cash incentive bonus payouts assuming target achievement of corporate goals, based upon the named executive officer's cash incentive bonus target and base salary in effect on December 31, 2018. No minimum threshold amount or maximum amount beyond the target amount was established. See the column entitled "Non-Equity Incentive Plan Compensation" in the Summary Compensation Table for the cash incentive bonuses earned by the named executive officers in 2018. See "Compensation Discussion and Analysis—Components of Executive Compensation *Annual Performance-Based Cash Incentive Compensation*" for a description of the target amount applicable to each named executive officer.
- (2) Represents grants of restricted share units made to the named executive officers in 2018. Such awards vest annually in equal installments over a four-year period beginning on February 15, 2018, subject to such officer's continued service with us on each such vesting date.
- (3) Represents grants of share options made to the named executive officers in 2018. Such awards have a four-year vesting period, with 25% of the shares subject to the award vesting on the first anniversary of February 15, 2018 and the remainder vesting quarterly in equal installments over the following 12 quarters, subject to such officer's continued service with us on each vesting date.
- (4) Represents the closing market price of the shares on the grant date.
- (5) Amount represents the aggregate grant date fair value for the options and restricted share unit awards, as applicable, computed in accordance with FASB ASC Topic 718. A discussion of the assumptions used in determining grant date fair value may be found in Note 7 to the financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2018.

Each of our named executive officers entered into an employment agreement or offer letter with the Company in connection with the commencement of his or her employment. All agreements provide for at-will employment and that our named executive officers are eligible to participate in employee benefit plans of general applicability to other employees, which we maintain from time to time. In addition, as a condition of their employment, each of our named executive officers has entered into a non-competition and non-solicitation agreement pursuant to which he or she has agreed not to compete with us for a period of 12 months following the termination of his or her employment.

#### 2014 Equity Incentive Plan

Our 2014 Equity Incentive Plan was amended on August 10, 2017, following receipt of shareholder approval at our 2017 Annual General Meeting. Accordingly, based on approval at our 2017 Annual General Meeting, our Board and shareholders authorized 6,064,544 ordinary shares for the granting of incentive options, non-qualified options, or NQSOs, share appreciation rights and restricted share unit awards, plus annual increases on the first day of July 2018, 2019 and 2020 equal to the lesser of (A) 3% of the ordinary shares outstanding on the day prior to the increase; and (B) such lesser number of ordinary shares as determined by the Board; provided that no more than 10,000,000 ordinary shares may be issued upon the exercise of incentive share options. On July 1, 2018 the 2014 Equity Incentive Plan was increased by 878,800 ordinary shares. The maximum number of ordinary shares with respect to awards which may be granted to any participant in any fiscal year under the 2014 Equity Incentive Plan is 600,000 shares. In the event of a share dividend, split, recapitalization or reorganization or other change in capital structure, our Board will make appropriate adjustments to these amounts.

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

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

#### **Outstanding Equity Awards at 2018 Fiscal Year-End**

The following table shows grants of options and grants of unvested restricted share unit awards outstanding on the last day of the fiscal year ended December 31, 2018 to each of the executive officers named in the Summary Compensation Table.

		Option Awards				Share Awards			
Name	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price (\$)	Option Expiration Date	Number of Shares or Share Units That Have Not Vested (#)	Market Value of Shares or Share Units That Have Not Vested (\$)			
Paul B. Bolno, M.D., MBA	494,025		\$ 2.48	3/10/2025					
	147,750	88,650(1)	\$18.79	6/16/2026					
	33,228	39,272(2)	\$29.05	1/25/2027					
	_	109,000(3)	\$40.05	1/23/2028					
					27,225(4) 54,500(5)	\$ 1,144,539 \$ 2,291,180			
Keith C. Regnante.	40,500	50,000(6)	\$20.89	8/16/2026					
	3,941	4,659(2)	\$29.05	1/25/2027					
	_	26,000(3)	\$40.05	1/23/2028					
					3,225(4)	\$ 135,579			
					13,000(5)	\$ 546,520			
Christopher Francis, Ph.D.	40,997	_	\$ 2.48	3/10/2025					
	23,189	13,911(1)	\$18.79	6/16/2026					
	8,937	10,563(2)	\$29.05	1/25/2027					
	_	26,000(3)	\$40.05	1/23/2028					
					7,350(4)	\$ 308,994			
		(=)			13,000(5)	\$ 546,520			
Michael Panzara, M.D., MPH	71,875	59,375(7)	\$21.69	7/11/2026					
	6,324	7,476(2)	\$29.05	1/25/2027					
	_	35,000(3)	\$40.05	1/23/2028	E 475(4)	ф D47.557			
					5,175(4)	\$ 217,557			
Charles W Ph. D	211.004		ф D 40	2/10/2025	17,500(5)	\$ 735,700			
Chandra Vargeese, Ph.D.	211,964	10.000(1)	\$ 2.48	3/10/2025					
	30,994	18,606(1)	\$18.79	6/16/2026					
	8,937	10,563(2)	\$29.05	1/25/2027					
	_	35,000(3)	\$40.05	1/23/2028	7,350(4)	\$ 308,994			
					17,500(5)	\$ 735,700			

<sup>(1) 25%</sup> vested on June 16, 2017 and the remainder vests in equal monthly installments over the following 36 months, subject to such officer's continued service with us on each such vesting date. The option shall become fully vested upon a change of control.

<sup>(2) 25%</sup> vested on February 15, 2018 and the reminder vests in equal monthly installments over the following 36 months, subject to such officer's continued service with us on each such vesting date. The option shall become fully vested upon a change of control.

<sup>(3) 25%</sup> vested on February 15, 2019 and the remainder vests in equal quarterly installments over the following 12 quarters, subject to such officer's continued service with us on each such vesting date. The award shall become fully vested upon termination without cause or for good reason within 12 months following a change of control.

<sup>(4) 25%</sup> vested on February 15, 2018 and the remainder vests in equal annual installments over the following three years, subject to such officer's continued service with us on each such vesting date. The award shall become fully vested upon a change of control.

- (5) 25% vested on February 15, 2019 and the remainder vests in equal annual installments over the following three years, subject to such officer's continued service with us on each such vesting date. The award shall become fully vested upon termination without cause or for good reason within 12 months following a change of control.
- (6) 25% vested on August 16, 2017 and the remainder vests in equal monthly installments over the following 36 months, subject to such officer's continued service with us on each such vesting date. The option shall become fully vested upon a change of control.
- (7) 25% vested on July 11, 2017 and the remainder vests in equal monthly installments over the following 36 months, subject to such officer's continued service with us on each such vesting date. The option shall become fully vested upon a change of control.

## **Option Exercises and Stock Vested**

The following table shows information regarding exercises of options to purchase our shares and vesting of restricted share unit awards held by each executive officer named in the Summary Compensation Table during the fiscal year ended December 31, 2018.

	Option Aw	ards	Share Awards		
Name	Number of Shares Acquired on Exercise (#)	Value Realized on Exercise (\$)(1)	Number of Shares Acquired on Vesting (#)	Value Realized on Vesting (\$)(2)	
Paul B. Bolno, M.D., MBA.	50,000	2,126,000	9,075	474,169	
Keith C. Regnante.	29,500	1,005,936	1,075	56,169	
Christopher Francis, Ph.D.	105,979	4,748,295	2,450	128,013	
Michael Panzara, M.D., MPH	18,750	530,813	1,725	90,131	
Chandra Vargeese, Ph.D.	7,000	327,301	2,450	128,013	

<sup>(1)</sup> The value realized on the exercise of options was calculated by multiplying the number of options exercised on the applicable exercise date by the difference between the sale price of the shares and the exercise price of the options.

#### **Pension Benefits**

We do not have any qualified or non-qualified defined benefit plans.

#### **Nonqualified Deferred Compensation**

We do not have any nonqualified defined contribution plans or other deferred compensation plan.

#### **Potential Payments upon Termination or Change-In-Control**

Pursuant to an employment agreement entered into with Dr. Bolno in connection with his initial employment in 2013, if we terminate his employment without cause, he will be entitled to receive as of the date of his termination continued payment of his base salary for 12 months. Cause under Dr. Bolno's employment agreement is defined as: (i) an act of dishonesty made in connection with his responsibilities as an employee; (ii) a conviction of, or plea of nolo contendere to, a felony or any crime involving fraud, embezzlement or any other act of moral turpitude; (iii) gross misconduct; (iv) unauthorized use or disclosure of any proprietary information or trade secrets of the Company; (v) termination due to the Company becoming insolvent; (vi) willful breach of any obligations under any written agreement or covenant with the Company; or (vii) continued failure to perform employment duties after having received a written demand of performance from the Company.

<sup>(2)</sup> The value realized on the vesting of restricted share units was calculated by multiplying the number of shares vesting on the applicable vesting date by the closing market price of the shares on such date.

Pursuant to an employment entered into with Dr. Panzara in connection with his initial employment in July 2016 and with Mr. Regnante in connection with his initial employment in August 2016, if Dr. Panzara or Mr. Regnante is involuntarily terminated by the Company without cause or terminates employment for good reason, he will be entitled to receive continued payment of his base salary for 12 months following termination, continued payment of health insurance premiums at the Company's then normal rate of contribution until the earlier of 12 months following termination or until he commences new employment. In addition, if a change of control occurs and within one year following the change of control, Dr. Panzara or Mr. Regnante is involuntarily terminated without cause or terminates his employment for good reason, he will be entitled to receive a lump sum cash payment equal to 12 months of his then-current annual base salary; the payment of a separation bonus equal to his then annual target bonus opportunity, prorated through his termination date; and continued payment of health insurance premiums at the Company's then normal rate of contribution until the earlier of 12 months following the termination date or until he commences new employment. Receipt of the severance and change of control benefits described above are subject to execution of a release of claims against the Company and compliance with certain restrictive covenants following the termination of his employment.

Cause under the employment agreements of Dr. Panzara or Mr. Regnante shall include: (i) willful engagement in dishonesty, illegal conduct or gross misconduct, which is, in each case, materially injurious to the Company or any affiliate; (ii) significant insubordination; (iii) substantial malfeasance or nonfeasance of duty; (iv) unauthorized disclosure of confidential information; (v) embezzlement, misappropriation or fraud, whether or not related to employment with the Company; or (vi) breach of a material provision of any employment, non-disclosure, invention assignment, non-competition, or similar agreement with the Company.

Good Reason under the employment agreements of Dr. Panzara or Mr. Regnante means: (i) relocation of his principal business location to a location more than 50 miles; (ii) a material diminution in Executive's duties, authority or responsibilities; or (iii) a material reduction in his base salary (other than as a result of a broad based reduction of salary similarly affecting other Company executives having comparable rank, authority and seniority).

Drs. Francis and Vargeese do not have any severance arrangements with the Company.

Pursuant to applicable equity agreements with each of Drs. Bolno, Francis, Panzara and Vargeese and Mr. Regnante, all unvested shares underlying outstanding options and restricted share units that were granted through December 31, 2017 will become fully vested upon a change of control which is defined as follows: (A) a merger or consolidation of the Company whether or not approved by the Board, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or the parent of such corporation) more than 50% of the total voting power represented by the voting securities of the Company or such surviving entity or parent of such corporation, as the case may be, outstanding immediately after such merger or consolidation; or (B) the sale or disposition by the Company of all or substantially all of the Company's assets in a transaction requiring shareholder approval.

Pursuant to applicable equity agreements with each of Drs. Bolno, Francis, Panzara and Vargeese and Mr. Regnante, all unvested shares underlying outstanding options and restricted share units that are granted after December 31, 2017 will become fully vested upon termination without cause or for good reason within 12 months following a change of control, as defined above.

The following table sets forth estimates of the payments and benefits each named executive officer would have been entitled to receive from the Company upon a termination of employment under the circumstances described in the table effective December 31, 2018. In accordance with SEC rules, the potential payments were determined under the terms of the Company's contracts, agreements, plans and arrangements as in effect on December 31, 2018. The tables do not include any previously vested equity awards or accrued benefits. Because the payments to be made to a named executive officer depend on several factors, the actual amounts to be paid out upon a triggering event can only be determined at the time of the triggering event.

Name	Compensation Component	Involuntary Not for Cause Termination (\$)	Voluntary for Good Reason Termination (\$)	Acceleration of Vesting Upon a Change of Control (\$)	Termination Without Cause or For Good Reason Within 12 Months Following a Change of Control (\$)
Paul B. Bolno, M.D., MBA.	Base salary	541,100(2)			541,100(2)
	Non-equity incentive compensation Acceleration of unvested options and RSUs(1) Benefits and Perquisites	_ _ _	_ _ _	27,126,243 —	2,508,090 —
Keith C. Regnante	Base salary	350,000(2)	350,000(2)	_	350,000(2)
	Non-equity incentive compensation Acceleration of unvested options and RSUs(1) Benefits and Perquisites			2,161,368 —	140,000(3) 598,260 22,713(4)
Christopher Francis, Ph.D.	Base salary			_	
	Non-equity incentive compensation Acceleration of unvested options and RSUs(1) Benefits and Perquisites	_ _ _	=	3,046,715 —	598,260 —
Michael Panzara, M.D., MPH	Base salary Non-equity incentive compensation	430,300(2)	430,300(2)	_	430,300(2) 172,120(3)
	Acceleration of unvested options and RSUs(1) Benefits and Perquisites	<u> </u>	209(4)	3,067,757	805,350 209(4)
Chandra Vargeese, Ph.D.	Base salary Non-equity incentive compensation Acceleration of unvested options and RSUs(1)	_	_	 10,100,795	805,350
	Benefits and Perquisites	_		10,100,795	805,350 —

Value attributable to accelerated vesting of (i) then unvested options, determined by multiplying the number of shares accelerated by the difference between the exercise price of the option and the closing price of our shares on December 31, 2018, and (ii) then unvested RSUs, determined by multiplying the number of RSUs accelerated by the closing price of our shares on December 31, 2018.

#### **Director Compensation**

The following table shows the total compensation paid or accrued during the fiscal year ended December 31, 2018 to each of our non-employee directors. Directors who are also employees are not compensated for their service on our Board.

	Fees Earned or			
	Paid in Cash		All Other	
<u>Name</u>	(\$) (1)	Option Awards (\$) (2)	Compensation (\$)	Total (\$)
Christian Henry	94,902	200,145		295,047
Peter Kolchinsky, Ph.D.	45,902	200,145		246,047
Koji Miura	44,402	200,145	<del>_</del>	244,547
Adrian Rawcliffe	44,402	200,145		244,547
Ken Takanashi	45,902	200,145	<del>_</del>	246,047
Gregory L. Verdine, Ph.D.	36,902	200,145	150,000(3)	387,047

<sup>(1)</sup> Amounts represent fees earned during 2018 under our Non-Employee Director Compensation Policy.

Twelve months of 2018 base salary continuation.

Target non-equity incentive compensation for 2018.

Payment of COBRA premiums for twelve months based on executive's current benefits elections.

- (2) Amount represents the aggregate grant date fair value for the option awards identified, computed in accordance with FASB ASC Topic 718. A discussion of the assumptions used in determining grant date fair value may be found in Note 7 to the financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2018.
- (3) Amount paid pursuant to a consulting agreement between the Company and Dr. Verdine.

The following table shows the aggregate number of shares subject to options held by each of our non-employee directors as of December 31, 2018.

Name	Aggregate Number of Shares Subject to Options
Christian Henry	36,000
Peter Kolchinsky, Ph.D.	27,000
Koji Miura	27,000
Adrian Rawcliffe	36,000
Ken Takanashi	27,000
Gregory L. Verdine, Ph.D.	559,803

The following is a description of the standard compensation arrangements under which our directors are compensated for their service as directors, including as members of the various committees of our Board. At the 2018 Annual General Meeting, our shareholders approved a compensation policy for our non-employee directors, or the Non-Employee Director Compensation Policy, which remains in effect through the date on which our 2019 Annual General Meeting of Shareholders is held at which time we will be required under Singapore law to ask our shareholders to approve next year's director compensation. Our non-employee directors are entitled to receive the following compensation under the Non-Employee Director Compensation Policy:

- Annual cash compensation of \$40,000 to each non-employee director, other than the Chairman of the Board, and cash compensation of \$65,000 to the non-employee Chairman of the Board.
- Additional annual cash compensation of \$15,000 to the Chairman of the Audit Committee and \$7,500 to each member of the Audit Committee other than the Chairman, in each case provided that such person is an independent director.
- Additional annual cash compensation of \$10,000 to the Chairman of the Compensation Committee and \$5,000 to each member of the Compensation Committee other than the Chairman, in each case provided that such person is an independent director.
- Additional annual cash compensation of \$8,000 to the Chairman of the Nominating and Corporate Governance Committee and \$4,000 to
  each member of the Nominating and Corporate Governance Committee other than the Chairman, in each case provided that such person is
  an independent director.
- One-time equity grant upon initial appointment or election to the Board of an option to purchase 18,000 ordinary shares, 25% of which shall vest on the first anniversary of the grant and the remaining 75% of which shall vest quarterly thereafter for three years.
- Annual equity grant of an option to purchase 9,000 ordinary shares, all of which shall vest on the first anniversary of the grant.
- Additional pro rata cash compensation of the annual cash compensation amounts set forth above shall be made, as applicable, to (i) any
  director who ceases to be a director, Chairman of the Board or member or chairman of any committee of the Board and (ii) any new
  non-employee director who is appointed by the Board, any independent director who is appointed to the position of Chairman of the Board
  or chairman of any such committee of the Board or any independent director who is appointed to serve on any such committee of the Board,
  for their services rendered as a director and/or committee member, for the portion of the year in which such director so served.

#### Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

#### SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information with respect to the beneficial ownership of our ordinary shares as of April 1, 2019 for (i) the executive officers named in the Summary Compensation Table appearing elsewhere in this Amendment, (ii) each of our directors and director nominees, (iii) all of our current directors and executive officers as a group and (iv) each shareholder known by us to own beneficially more than 5% of our ordinary shares. Beneficial ownership is determined in accordance with the rules of the SEC and includes voting or investment power with respect to the securities. We deem ordinary shares that may be acquired by an individual or group within 60 days of April 1, 2019 pursuant to the exercise of options, or the vesting of restricted share unit awards, and the conversion of our outstanding Series A preferred shares into ordinary shares to be outstanding for the purpose of computing the percentage ownership of such individual or group, but such shares are not deemed to be outstanding for the purpose of computing the percentage ownership of any other person shown in the table. Except as indicated in footnotes to this table, we believe that the shareholders named in this table have sole voting and investment power with respect to all ordinary shares shown to be beneficially owned by them based on information provided to us by these shareholders. Percentage ownership is based on 34,255,406 ordinary shares outstanding on April 1, 2019.

	Ordinary Shares Beneficially Owned	
<u>Name</u>	Shares	Percent
5% Beneficial Owners		
RA Capital Management, LLC(1)	7,775,207	22.7%
Shin Nippon Biomedical Laboratories, Ltd.(2)	5,885,478	15.4%
Redmile Group, LLC(3)	2,237,607	6.5%
Kagoshima Shinsangyo Sousei Investment Limited Partnership(4)	2,134,974	6.2%
Pfizer Inc.(5)	1,875,000	5.5%
Directors and Named Executive Officers		
Paul B. Bolno, M.D., MBA(6)	903,426	2.6%
Keith C. Regnante(7)	69,748	*
Christopher Francis, Ph.D.(8)	92,862	*
Michael Panzara, M.D., MPH(9)	120,012	*
Chandra Vargeese, Ph.D.(10)	277,248	*
Christian Henry(11)	20,249	*
Peter Kolchinsky, Ph.D.(12)	7,793,207	22.7%
Koji Miura( <sup>13</sup> )	18,000	*
Adrian Rawcliffe(14)	19,124	*
Ken Takanashi(15)	5,903,478	15.5%
Gregory L. Verdine, Ph.D.(16)	610,842	1.8%
All directors and executive officers as a group (11 individuals) <sup>(17)</sup>	15,828,196	39.5%

<sup>\*</sup> Represents less than 1% of ordinary shares outstanding on April 1, 2019.

<sup>(1)</sup> Based on information reported by RA Capital Management, LLC, or RA Capital, on Schedule 13D/A filed with the SEC on January 28, 2019. Such shares are held by RA Capital Healthcare Fund, L.P., or the Fund, and in a separately managed account, or the Account. RA Capital is the general partner of the Fund and serves as investment advisor for the Account. Peter Kolchinsky, Ph.D., a member of our Board, is the manager of RA Capital. RA Capital and Dr. Kolchinsky share voting and dispositive power with respect to such shares and may be deemed to beneficially own such shares. The address of RA Capital is 20 Park Plaza, Suite 1200, Boston, MA 02116.

- Based on information reported by Shin Nippon Biomedical Laboratories, Ltd., or SNBL, on Schedule 13D/A filed with the SEC on February 20, 2019. Consists of (i) 1,697,467 ordinary shares held by SNBL; (ii) 286,663 ordinary shares held by SNBL USA, Ltd., or SNBL USA; (iii) 1,801,348 Series A preferred shares held by SNBL; and (iv) 2,100,000 Series A preferred shares held by SNBL USA. The Series A preferred shares can be converted at any time on a one-for-one basis into ordinary shares at the discretion of the holder. SNBL has pledged 938,846 ordinary shares for the benefit of The Kagoshima Bank, Ltd., or Kagoshima Bank, in order to secure the obligations of SNBL under a loan agreement, dated September 14, 2018, between SNBL and Kagoshima Bank. Ken Takanashi, a member of our Board, is an executive officer of SNBL and an executive officer and director of SNBL USA. SNBL and Mr. Takanashi share voting and dispositive power with respect to such shares and may be deemed to beneficially own such shares. The address of SNBL is St. Luke's Tower 12F, 8-1, Akashi-cho, Chuo-ku, Tokyo 104-0044, Japan.
- (3) Based on information reported by Redmile Group, LLC on Schedule 13G/A filed with the SEC on February 14, 2019, such shares are owned by certain private investment vehicles and/or separately managed accounts managed by Redmile Group, LLC, which shares may be deemed beneficially owned by Redmile Group, LLC as investment manager of such private investment vehicles and/or separately managed accounts. These securities may also be deemed beneficially owned by Jeremy C. Green as the principal of Redmile Group, LLC. Redmile Group, LLC and Mr. Green each disclaim beneficial ownership of these shares, except to the extent of its or his pecuniary interest in such shares, if any. The address of Redmile Group, LLC is One Letterman Drive, Building D, Suite D3-300, The Presidio of San Francisco, San Francisco, CA 94129.
- (4) Based on information reported by Kagoshima Shinsangyo Sousei Investment Limited Partnership, or KSS, on Schedule 13D/A filed with the SEC on March 14, 2019. Kagoshima Development Co. Ltd., or Kagoshima Development, is the general partner of KSS. KSS and Kagoshima Development share voting and dispositive power with respect to such shares, and Kagoshima Development may be deemed to beneficially own such shares. The address of KSS is 1-10 Yamanokuchi-cho, Kagoshima City, Kagoshima, 892-0844, Japan.
- (5) Based on information reported by Pfizer Inc., on Schedule 13G filed with the SEC on May 12, 2016. Such shares are held by C.P. Pharmaceuticals International C.V., or the Shareholder, a Netherlands limited partnership. Pfizer Production LLC and Pfizer Manufacturing LLC, or the General Partners, are the general partners for C.P. Pharmaceuticals International C.V. Pfizer Inc. may be deemed to have beneficial ownership over such shares since the Shareholder and the General Partners are indirect wholly-owned subsidiaries of Pfizer Inc. The General Partners may be deemed to have beneficial ownership over such shares as the general partners of the Shareholder. The address of Pfizer Inc., the General Partners and the Shareholder is 235 E. 42nd Street, New York, NY 10017.
- (6) Consists of (i) 212,184 ordinary shares held by Dr. Bolno and (ii) 691,242 ordinary shares underlying options exercisable within 60 days of April 1, 2019.
- (7) Consists of (i) 3,786 ordinary shares held by Mr. Regnante and (ii) 65,962 ordinary shares underlying options exercisable within 60 days of April 1, 2019.
- (8) Consists of (i) 5,718 ordinary shares held by Dr. Francis and (ii) 87,144 ordinary shares underlying options exercisable within 60 days of April 1, 2019.
- (9) Consists of (i) 13,813 ordinary shares held by Dr. Panzara and (ii) 106,199 ordinary shares underlying options exercisable within 60 days of April 1, 2019.
- (10) Consists of (i) 7,220 ordinary shares held by Dr. Vargeese and (ii) 270,028 ordinary shares underlying options exercisable within 60 days of April 1, 2019.
- (11) Consists of ordinary shares underlying options exercisable within 60 days of April 1, 2019.
- (12) See Footnote (1) above. Also consists of 18,000 ordinary shares underlying options exercisable within 60 days of April 1, 2019 held by Dr. Kolchinsky.
- (13) Consists of ordinary shares underlying options exercisable within 60 days of April 1, 2019.
- (14) Consists of ordinary shares underlying options exercisable within 60 days of April 1, 2019.
- (15) See Footnote (2) above. Also consists of 18,000 ordinary shares underlying options exercisable within 60 days of April 1, 2019 held by Mr. Takanashi.

- (16) Consists of (i) 60,039 ordinary shares held by Dr. Verdine, and (ii) 550,803 ordinary shares underlying options exercisable within 60 days of April 1, 2019.
- (17) Consists of (i) 1,864,751 ordinary shares underlying options exercisable within 60 days of April 1, 2019, held by our directors and executive officers, (ii) 10,062,097 ordinary shares beneficially owned by our directors and executive officers and entities affiliated with certain of our directors and (iii) 3,901,348 Series A preferred shares, which can be converted at any time on a one-for-one basis into ordinary shares at the discretion of the holder, held by an entity affiliated with one of our directors.

## **EQUITY COMPENSATION PLAN INFORMATION**

The following table provides certain information with respect to our 2014 Equity Incentive Plan, which was our only equity compensation plan in effect as of December 31, 2018.

<u>Plan Category</u>	Number of Securities to be Issued upon Exercise of Outstanding Options, Warrants and Rights (1)	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights (2)	Number of Securities Remaining Available for Future Issuance under Equity Compensation Plans (3)
Equity compensation plans approved by security			
holders	4,425,111	\$ 19.47	1,545,151
Equity compensation plans not approved by security			
holders	<del>_</del>	<del>-</del>	_
Total	4,425,111	<u>\$ 19.47</u>	1,545,151

- (1) Consists of options to purchase 4,016,590 of our ordinary shares outstanding under the 2014 Equity Incentive Plan and 408,521 of our ordinary shares subject to RSUs outstanding under the 2014 Equity Incentive Plan.
- (2) Reflects the weighted average exercise price of the options to purchase 4,016,590 of our ordinary shares outstanding under the 2014 Equity Incentive Plan.
- (3) The number of shares available for future grants under the 2014 Equity Incentive Plan automatically increases on the first day of July 2018, 2019 and 2020 by an amount equal to the lesser of (A) 3% of the ordinary shares outstanding on the day prior to the increase; and (B) such lesser number of ordinary shares as determined by the Board. Accordingly, on July 1, 2018, the number of shares available for future grants increased by 878,800 shares.

## Item 13. Certain Relationships and Related Transactions, and Director Independence.

#### CERTAIN RELATIONSHIPS AND RELATED PERSON TRANSACTIONS

The following includes a summary of transactions since January 1, 2018 to which we have been a party, in which the amount involved in the transaction exceeded \$120,000, and in which any of our directors, executive officers or beneficial owners of more than 5% of our ordinary shares, on an as-converted basis, or any member of the immediate family of any of the foregoing persons had or will have a direct or indirect material interest, other than equity and other compensation, termination, change in control and other arrangements, which are described in Item 11, "Executive Compensation." We refer to such transactions as "related party transactions" or "related person transactions" and such persons as "related parties" or "related persons." With the approval of our Board, we have engaged in the related party transactions described below.

#### **Related Person Transaction Policy**

Our Board has adopted a written related person transaction policy that requires future transactions between us and any director, executive officer, holder of 5% or more of any class of our capital stock or any member of the immediate family of, or entities affiliated with, any of them, or any other related persons, as defined in Item 404 of Regulation S-K, or their affiliates, in which the amount involved is equal to or greater than \$120,000, be approved in advance by our Audit Committee, or if Audit Committee approval would be inappropriate, by another independent body of our Board. In approving or rejecting such proposed related person transaction, the committee is to consider all available information deemed relevant by the committee, including, but not limited to, the extent of the related person's interest in the transaction and whether the transaction is on terms no less favorable to us than terms we could have generally obtained from an unaffiliated third party under the same or similar circumstances. The committee approves only those transactions that, in light of known circumstances, are deemed to be in our best interests. In the event that any member of the committee is not a disinterested person with respect to the related person transaction under review, that member is excluded from the review and approval or rejection of such related person transaction; provided, however, that such committee member may be counted in determining the presence of a quorum at the meeting of the committee at which such transaction is considered. If we become aware of an existing related person transaction which has not been approved under the policy, the matter will be referred to the committee. The committee evaluates all options available, including ratification, revision or termination of such transaction. In the event that management determines that it is impractical or undesirable to wait until a meeting of the committee to consummate a related person transaction, the chair of the committee may approve such transac

## **Indemnification Agreements with Officers and Directors**

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

## **Participation in Our Public Offering**

On January 28, 2019, we closed a follow-on underwritten public offering of 3,950,000 ordinary shares for gross proceeds of \$150.1 million, and on February 26, 2019, we closed on the sale of an additional 592,500 ordinary shares pursuant to the underwriters' option (on the same terms and conditions as the initial closing) for gross proceeds of an additional \$22.5 million. Affiliates of RA Capital Management, LLC, or RA Capital, purchased 263,158 ordinary shares in the public offering at the public offering price of \$38.00 per share. RA Capital is the general partner of RA Capital Healthcare Fund, L.P., one of our principal stockholders. Peter Kolchinsky, Ph.D., a member of our Board, is the manager of RA Capital.

## **Registration Rights**

## Registration Rights Under Our Investors' Rights Agreement

As of April 1, 2019, the holders of approximately 7.3 million of our ordinary shares are entitled to rights with respect to the registration of these shares under the Securities Act. These rights are provided under the terms of the Investors' Rights Agreement dated as of August 14, 2015 between us and the holders of these shares, as

amended on November 8, 2018, and include demand registration rights, Form S-3 registration rights and piggyback registration rights. We are generally required to bear all registration expenses incurred in connection with the demand, Form S-3 and piggyback registrations described below, other than underwriting commissions and discounts, and will pay the reasonable fees and expenses, not to exceed \$25,000, of one special counsel to represent all participating shareholders in a registration. The holders of registration rights as of April 1, 2019 under the Investors' Rights Agreement include the following related parties:

<u>Name</u>	Securities
Entities affiliated with Shin Nippon Biomedical Laboratories, Ltd.(1)	1,859,130
Entities affiliated with RA Capital Healthcare Fund, L.P.(2)	5,213,651
Gregory L. Verdine, Ph.D.	60,039
Paul B. Bolno, M.D., MBA	190,856

- (1) Consists of (i) 1,697,467 ordinary shares held by SNBL and (ii) 161,663 ordinary shares held by SNBL USA, an affiliate of SNBL.
- (2) Consists of (i) 5,012,057 ordinary shares held by RA Capital and (ii) 201,594 shares held in a separately managed account for which RA Capital Management, LLC, the general partner of RA Capital, is investment advisor.

#### **Demand Registration Rights**

Under the terms of the Investors' Rights Agreement, we will be required, upon the request of holders of at least 50% of the then-outstanding shares of registrable securities, as such term is defined in the Investors' Rights Agreement, requesting registration of at least 50% of the then-outstanding shares of registrable securities having an anticipated aggregate offering price of at least \$25.0 million, net of selling expenses, to effect the registration of such shares on Form S-1 for public resale. We are required to effect only one registration pursuant to this provision of the Investors' Rights Agreement.

#### Form S-3 Registration Rights

At any time that we are entitled under the Securities Act to register our shares on Form S-3 and the holders of at least 30% of the then-outstanding registrable securities request that we register their shares for public resale on Form S-3 with an aggregate offering price of the shares to be registered of at least \$5.0 million, net of selling expenses, we will be required to effect such registration. If, however, our Chief Executive Officer certifies that, in the good faith judgment of our Board, it would be materially detrimental to us and our shareholders for such registration to become or remain effective because such action would (i) materially interfere with a significant acquisition, corporate reorganization or similar transaction involving us, (ii) require premature disclosure of material information that we have a bona fide business purpose for preserving as confidential, or (iii) render us unable to comply with requirements under the Securities Act or Exchange Act, then we will have the right to defer the registration for up to 120 days. We are only obligated to effect up to one registration on Form S-3 within any 12-month period.

## Piggyback Registration Rights

If we register any of our securities either for our own account or for the account of other shareholders, the holders of these shares are entitled to include their shares in the registration. Subject to certain exceptions, we and the underwriters may limit the number of shares included in the underwritten offering if the underwriters believe that including these shares would adversely affect the offering.

#### Indemnification

Our Investors' Rights Agreement contains customary cross-indemnification provisions, under which we are obligated to indemnify holders of registrable securities in the event of material misstatements or omissions in the registration statement attributable to us, and they are obligated to indemnify us for material misstatements or omissions attributable to them.

#### Termination of Registration Rights

The registration rights granted under the Investors' Rights Agreement will terminate on December 31, 2019 or, with respect to any holder of registrable securities, such earlier time as all such registrable securities held by such holder are available for resale without limitation during a three-month period without registration, pursuant to Rule 144 or another similar exemption under the Securities Act.

#### Registration Rights under our Share Purchase Agreement with Pfizer

Under the terms of our Share Purchase Agreement dated as of May 5, 2016 (the "Pfizer Equity Agreement") with an affiliate of Pfizer Inc. (the "Pfizer Affiliate"), the Pfizer Affiliate agreed that the 1,875,000 ordinary shares that the Pfizer Affiliate purchased from us under the Pfizer Equity Agreement (the "Pfizer Shares") are subject to a lock-up restriction, such that the Pfizer Affiliate will not, and will also cause its affiliates not to, without our prior approval, sell, transfer or otherwise dispose of the Pfizer Shares until certain specified periods of time after the effective date of the Pfizer Equity Agreement. For a certain period following the expiration of the lock-up period, subject to certain conditions and limitations, we agreed to provide certain demand registration rights to the Pfizer Affiliate in order to register all or a portion of the Pfizer Shares purchased by the Pfizer Affiliate. We also provided the Pfizer Affiliate with certain "piggyback" registration rights for a certain period following the expiration of the lock-up period, subject to certain conditions and limitations, such that when we propose to register our ordinary shares for our account, the Pfizer Affiliate will have the right to include some or all of the Pfizer Shares in such registration. The Pfizer Equity Agreement also contains other customary terms and conditions of the parties with respect to the registration of the Pfizer Shares.

#### Consulting Agreement with Gregory L. Verdine, Ph.D.

Gregory L. Verdine, Ph.D., a member of our Board, entered into a consulting agreement with Wave Life Sciences USA, Inc., or Wave USA, our wholly owned subsidiary, dated as of April 1, 2012, pursuant to which Dr. Verdine serves as a scientific advisor. The consulting agreement does not have a specified term and may be terminated by either party upon 14 days' prior written notice. Wave USA pays Dr. Verdine \$12,500 per month and, in 2018, Dr. Verdine was paid an aggregate of \$150,000 under this agreement.

#### Agreements with SNBL

Ken Takanashi, a member of our Board, is a director and executive officer of SNBL and its affiliates. Previously, we leased our corporate office space in Boston, Massachusetts under a non-cancellable operating sublease with SNBL, a related party. On September 22, 2015, we terminated our sublease with SNBL and exited the premises on October 2, 2015. In connection with the termination, we agreed to guarantee SNBL certain obligations of an unrelated third party who entered into a sublease agreement with SNBL effective October 2, 2015. The guarantee provides that in the event the sub-lessee does not meet its lease obligations to SNBL, we will make the required payments. The guarantee agreement is effective through August 2019, when the final lease payments are due, and coincides with the original expiration of the lease. We simultaneously entered into an indemnification agreement with the sub-lessee to indemnify us for any costs incurred under the guaranty made by us to SNBL. The maximum amount of the guarantee over the three-year and six-month sublease period is \$0.6 million, exclusive of any indemnification from the sub-lessee.

In addition, pursuant to the terms of certain service agreements we have with SNBL, in 2018, we paid SNBL \$1.3 million for contract research services provided to us and our affiliates through October 1, 2018.

#### Agreements with Pfizer and its Affiliate

On May 5, 2016, we entered into a Research, License and Option Agreement with Pfizer Inc., which we refer to herein as the "Pfizer Collaboration Agreement." Simultaneously with the entry into the Pfizer Collaboration Agreement, on May 5, 2016, we entered into a Share Purchase Agreement, or the "Pfizer Equity Agreement," with C.P. Pharmaceuticals International C.V., an affiliate of Pfizer, or the "Pfizer Affiliate." We refer to the Pfizer Collaboration Agreement and the Pfizer Equity Agreement herein collectively as the "Pfizer Agreements."

Pursuant to the terms of the Pfizer Collaboration Agreement, we and Pfizer have agreed to collaborate on the discovery, development and commercialization of stereopure oligonucleotide therapeutics for up to five programs (each, a "Pfizer Program"), each directed at a genetically-defined hepatic target selected by Pfizer. Under the Pfizer Collaboration Agreement, the parties agreed to collaborate during a four-year research term. The term of the Pfizer Collaboration Agreement runs from the effective date until the date of the last to expire payment obligations with respect to each Pfizer Program and with respect to each Company program, and expires on a program-by-program basis accordingly.

Under the terms of the Pfizer Agreements, Pfizer paid us \$40.0 million upfront, \$30.0 million of which was in the form of an equity investment in our ordinary shares. Subject to option exercises by Pfizer, assuming five potential products are successfully developed and commercialized, we 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 collaboration pursuant to the Pfizer Collaboration Agreement.

Under the Pfizer Equity Agreement, we issued 1,875,000 ordinary shares, or the "Pfizer Shares," to the Pfizer Affiliate at a purchase price of \$16.00 per share, for an aggregate purchase price of \$30.0 million. Under the terms of the Pfizer Equity Agreement, the Pfizer Shares were subject to a lock-up restriction, such that the Pfizer Affiliate agreed not to, nor cause its affiliates to, without our prior approval, sell, transfer or otherwise dispose of the Pfizer Shares until certain specified periods of time after the effective date of the Pfizer Equity Agreement. We also agreed to provide the Pfizer Affiliate with registration rights, as described under "Registration Rights" above.

#### DIRECTOR INDEPENDENCE

Our Board has reviewed the materiality of any relationship that each of our directors has with the Company, either directly or indirectly. Based upon this review, our Board has determined that the following members of the Board are "independent directors" as defined by the Nasdaq Stock Market: Dr. Kolchinsky and Messrs. Henry, Miura, Rawcliffe, and Takanashi.

#### Item 14. Principal Accounting Fees and Services.

The following table presents fees for professional audit services rendered by KPMG LLP, our independent registered public accountant firm, for the services described in the table.

	2018	2017
Audit fees(1)	\$ 1,458,814	\$ 1,143,931
Audit-related fees(2)	_	_
Tax fees(2)	_	
All other fees(2)		

<sup>(1)</sup> Audit fees consisted of audit work performed in the preparation of financial statements, as well as work generally only the independent registered public accounting firm can reasonably be expected to provide, such as statutory audits and the provision of consents in connection with the filing of registration statements and related amendments, as well as other filings.

<sup>(2)</sup> There were no audit-related, tax or other fees in 2017 or 2018.

#### Policy on Audit Committee Pre-Approval of Audit and Permissible Non-Audit Services of Independent Public Accountant

In connection with our initial public offering, we adopted a policy under which the Audit Committee must pre-approve all audit and permissible non-audit services to be provided by the independent registered public accounting firm. As part of its review, the Audit Committee also considers whether the categories of pre-approved services are consistent with the rules on accountant independence of the SEC and the Public Company Accounting Oversight Board. The Audit Committee pre-approved all services performed since the pre-approval policy was adopted.

Prior to engagement of an independent registered public accounting firm for the next year's audit, management will submit an aggregate of services expected to be rendered during that year for each of four categories of services to the Audit Committee for approval.

- 1. *Audit* services include audit work performed in the preparation of financial statements, as well as work that generally only an independent registered public accounting firm can reasonably be expected to provide, including comfort letters, statutory audits, and attest services and consultation regarding financial accounting and/or reporting standards.
- 2. *Audit-related* services are for assurance and related services that are traditionally performed by an independent registered public accounting firm, including due diligence related to mergers and acquisitions, employee benefit plan audits, and special procedures required to meet certain regulatory requirements.
- 3. *Tax* services include all services performed by an independent registered public accounting firm's tax personnel except those services specifically related to the audit of the financial statements, and includes fees in the areas of tax compliance, tax planning, and tax advice.
- 4. *Other fees* are those associated with services not captured in the other categories. The Company generally does not request such services from our independent registered public accounting firm.

Prior to engagement, the Audit Committee pre-approves these services by category of service. During the year, circumstances may arise when it may become necessary to engage our independent registered public accounting firm for additional services not contemplated in the original pre-approval. In those instances, the Audit Committee requires specific pre-approval before engaging our independent registered public accounting firm.

The Audit Committee may delegate pre-approval authority to one or more of its members. The member to whom such authority is delegated must report, for informational purposes only, any pre-approval decisions to the Audit Committee at its next scheduled meeting.

## **PART IV**

## Item 15. Exhibits, Financial Statement Schedules.

**Item 15(a).** The documents listed below are filed as part of this Amendment No. 1 to Annual Report on Form 10-K/A.

Item 15(a)(1) and (2). See Index to Consolidated Financial Statements on page F-1 of the Original 10-K. Other financial statement schedules

have not been included because they are not applicable or the information is included in the financial statements or

notes thereto.

**Item 15(a)(3).** Exhibits: The exhibits listed below are filed with, or incorporated by reference in, this Amendment.

Exhibit Number	Exhibit Description	Filed with this Report	Incorporated by Reference herein from Form or Schedule	Filing Date	SEC File/Reg. Number
3.1	Constitution (formerly known as Memorandum of Association and Articles of Association)		Amendment No. 5 to Form S-1 (Exhibit 3.2)	11/10/2015	333-207379
4.1	Form of Specimen Ordinary Share Certificate		Amendment No. 3 to Form S-1 (Exhibit 4.1)	11/06/2015	333-207379
4.2.1	<u>Investors' Rights Agreement by and among the Registrant and certain of its shareholders, dated as of August 14, 2015</u>		Form S-1 (Exhibit 4.2)	10/09/2015	333-207379
4.2.2	Amendment No. 1 to Investors' Rights Agreement by and among the Registrant and certain of its shareholders, dated as of November 8, 2018		Form 10-Q (Exhibit 10.2)	11/09/2018	001-37627
4.3†	<u>Share Purchase Agreement by and between the Registrant and C.P. Pharmaceuticals International C.V., dated as of May 5, 2016</u>		Form 10-Q (Exhibit 10.2)	08/15/2016	001-37627
Lease Agre	<u>eements</u>				
10.1	<u>Lease Agreement by and among Harvard Real Estate—Allston, Inc., Shin Nippon Biomedical Laboratories Ltd., dated June 25, 2009</u>		Form S-1 (Exhibit 10.2)	10/09/2015	333-207379
10.2	Commercial Lease Agreement by and among SNBL USA, Ltd. and Ontorii, Inc. (now Wave Life Sciences USA, Inc.), dated as of January 1, 2010		Form S-1 (Exhibit 10.4)	10/09/2015	333-207379
10.3	Consent to Office Space Sublease by and among SNBL USA, Ltd, Ontorii, Inc. (now Wave Life Sciences USA, Inc.) and Harvard Real Estate—Allston, Inc., dated as of January 1, 2010		Form S-1 (Exhibit 10.3)	10/09/2015	333-207379

Exhibit Number	Exhibit Description	Filed with this Report	Incorporated by Reference herein from Form or Schedule	Filing Date	SEC File/Reg. Number
10.4	Amendment 1 to the Commercial Lease Agreement by and between SNBL USA, Ltd. and Ontorii, Inc. (now Wave Life Sciences USA, Inc.), dated as of July 1, 2011		Form S-1 (Exhibit 10.5)	10/09/2015	333-207379
10.5	<u>Lease Agreement by and between the Registrant and King 733</u> <u>Concord LLC, dated as of April 6, 2015</u>		Form S-1 (Exhibit 10.7)	10/09/2015	333-207379
10.6	<u>Lease Agreement by and between Wave Life Sciences USA, Inc. and King 115 Hartwell LLC, dated as of September 26, 2016.</u>		Form 8-K (Exhibit 10.1)	09/27/2016	001-37627
10.7	First Amendment (to Lease) by and between Wave Life Sciences USA, Inc. and King 115 Hartwell LLC, dated as of December 31, 2016		Form 8-K (Exhibit 10.1)	01/06/2017	001-37627
<u>Collaboration</u>	on and License Agreements				
10.8†	Co-Exclusive License Agreement by and between the Registrant and Max-Planck-Innovation GmbH, dated as of June 8, 2015		Form S-1 (Exhibit 10.10)	10/09/2015	333-207379
10.9.1†	Research, License and Option Agreement by and between the Registrant and Pfizer Inc., dated as of May 5, 2016		Form10-Q (Exhibit 10.1)	08/15/2016	001-37627
10.9.2	Amendment No. 1 to Research, License and Option Agreement by and between the Registrant and Pfizer Inc., dated as of November 5, 2017		Form 10-K (Exhibit 10.9.2)	03/12/2018	001-37627
10.10†	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		Form 10-Q (Exhibit 10.1)	05/09/2018	001-37627
10.11	Share Purchase Agreement by and between Takeda Pharmaceutical Company Limited and the Registrant, dated as of February 19, 2018		Form 10-Q (Exhibit 10.2)	05/09/2018	001-37627
10.12	<u>Investor Agreement by and between Takeda Pharmaceutical</u> <u>Company Limited and the Registrant, dated as of April 2, 2018</u>		Form 10-Q (Exhibit 10.3)	05/09/2018	001-37627
Agreements	with Executive Officers and Directors				
10.13+	<u>Form of Deed of Indemnity by and between the Registrant and each of its directors and certain of its officers</u>		Form S-1 (Exhibit 10.11)	10/09/2015	333-207379

Exhibit Number	Exhibit Description	Filed with this Report	Incorporated by Reference herein from Form or Schedule	Filing Date	SEC File/Reg. Number
10.14+	Employment Agreement by and between the Registrant and Paul B. Bolno, M.D., dated as of December 12, 2013		Form S-1 (Exhibit 10.12)	10/09/2015	333-207379
10.15+	Offer Letter by and between the Registrant and Chandra Vargeese, Ph.D., dated as of July 2, 2014		Form S-1 (Exhibit 10.14)	10/09/2015	333-207379
10.16+	Offer Letter by and between the Registrant and Christopher Francis, Ph.D., dated as of March 10, 2014		Form S-1 (Exhibit 10.15)	10/09/2015	333-207379
10.17+	Employment Agreement between the Registrant and Michael Panzara, M.D. dated as of July 11, 2016		Form 10-Q (Exhibit 10.4)	11/09/2016	001-37627
10.18+	Employment Agreement between the Registrant and Keith C. Regnante dated as of August 16, 2016		Form 10-Q (Exhibit 10.5)	11/09/2016	001-37627
10.19+	Non-Employee Director Compensation Policy, as amended, effective as of August 13, 2018		Form 10-Q (Exhibit 10.1)	11/09/2018	001-37627
10.20+	Consulting Agreement by and between Ontorii, Inc. (now Wave Life Sciences USA, Inc.) and Gregory Verdine, dated as of April 1, 2012		Form S-1 (Exhibit 10.16)	10/09/2015	333-207379
10.21+	Nominee Director Fee Agreement by and between the Registrant and Miura & Associates Management Consultants Pte. Ltd., dated as of October 23, 2012		Form S-1 (Exhibit 10.17)	10/09/2015	333-207379
<b>Equity and O</b>	ther Compensation Plans				
10.22+	Wave Life Sciences Ltd. 2014 Equity Incentive Plan, as amended (the "2014 Equity Plan")		Form 10-Q (Exhibit 10.1)	11/09/2017	001-37627
10.23.1+	Form of Non-qualified Share Option Agreement under the 2014 Equity Plan, effective as of December 2014		Form S-8 (Exhibit 10.1)	12/17/2015	333-208598
10.23.2+	Form of Non-qualified Share Option Agreement under the 2014 Equity Plan, effective as of September 20, 2016		Form 10-Q (Exhibit 10.2)	11/09/2017	001-37627
10.23.3+	Form of Non-qualified Share Option Agreement under the 2014 Equity Plan, effective as of January 1, 2018		Form 10-K (Exhibit 10.23.3)	03/01/2019	001-37627
10.24.1+	Form of Incentive Share Option Agreement under the 2014 Equity Plan, effective as of December 2014		Form S-8 (Exhibit 10.1)	12/17/2015	333-208598

Exhibit Number	Exhibit Description	Filed with this Report	Incorporated by Reference herein from Form or Schedule	Filing Date	SEC File/Reg. Number
10.24.2+	Form of Incentive Share Option Agreement under the 2014 Equity Plan, effective as of September 20, 2016		Form 10-Q (Exhibit 10.3)	11/09/2017	001-37627
10.25.1+	Form of Restricted Share Unit Agreement under the 2014 Equity Plan, effective as of June 16, 2016		Form 10-Q (Exhibit 10.4)	11/09/2017	001-37627
10.25.2+	Form of Restricted Share Unit Agreement under the 2014 Equity Plan, effective as of January 1, 2018		Form 10-K (Exhibit 10.25.2)	03/01/2019	001-37627
10.26.1+	Form of Non-qualified Share Option Agreement for UK Participants under the 2014 Equity Plan, effective as of June 21, 2017		Form 10-Q (Exhibit 10.5)	11/09/2017	001-37627
10.26.2+	Form of Non-qualified Share Option Agreement for UK Participants under the 2014 Equity Plan, effective as of January 1, 2018		Form 10-K (Exhibit 10.26.2)	03/01/2019	001-37627
21.1	List of Subsidiaries of the Registrant		Form 10-K (Exhibit 21.1)	03/12/2018	001-37627
23.1	Consent of Independent Registered Public Accounting Firm		Form 10-K (Exhibit 23.1)	03/01/2019	001-37627
24.1	Power of Attorney (included on signature page to the Original 10-K)		Form 10-K (Exhibit 24.1)	03/01/2019	001-37627
31.1	Certifications of Principal Executive Officer pursuant to Rule 13a-14(a)	X			
31.2	Certifications of Principal Financial Officer pursuant to Rule 13a-14(a)	X			
32*	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, by Principal Executive Officer and Principal Financial Officer.		Form 10-K (Exhibit 32)	03/01/2019	001-37627
101.INS	XBRL Instance Document		Form 10-K (Exhibit 101.INS)	03/01/2019	001-37627
101.SCH	XBRL Taxonomy Extension Schema Document		Form 10-K (Exhibit 101.SCH)	03/01/2019	001-37627
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document		Form 10-K (Exhibit 101.CAL)	03/01/2019	001-37627
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document		Form 10-K (Exhibit 101.DEF)	03/01/2019	001-37627

Exhibit Number	Exhibit Description	Filed with this Report	Incorporated by Reference herein from Form or Schedule	Filing Date	SEC File/Reg. Number
101.LAB	XBRL Taxonomy Extension Label Linkbase Document		Form 10-K (Exhibit 101.LAB)	03/01/2019	001-37627
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document		Form 10-K (Exhibit 101.PRE)	03/01/2019	001-37627

<sup>(\*)</sup> The certification incorporated by reference as Exhibit 32 that was attached to the Original 10-K is not deemed filed with the Securities and Exchange Commission and is 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 the Original 10-K, irrespective of any general incorporation language contained in such filing.

## Item 16. Form 10-K Summary.

None.

<sup>(+)</sup> Indicates management contract or compensatory plan or arrangement.

<sup>(†)</sup> Confidential treatment has been granted 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 Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this Amendment No. 1 to Annual Report on Form 10-K/A to be signed on its behalf by the undersigned, thereunto duly authorized.

Wave Life Sciences Ltd.

Date: April 29, 2019 By: /s/ Paul B. Bolno, M.D., MBA

Paul B. Bolno, M.D., MBA
President and Chief Executive Officer

## CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

## I, Paul B. Bolno, M.D., certify that:

- $1. \hspace{0.5cm} \hbox{I have reviewed this Amendment No. 1 to Annual Report on Form 10-K/A of Wave Life Sciences Ltd.} \\$
- 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.

Date: April 29, 2019

/s/ Paul B. Bolno, M.D., MBA
Paul B. Bolno, M.D., MBA
President and Chief Executive Officer
(principal executive officer)

## CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

## I, Keith C. Regnante, certify that:

- $1. \hspace{0.5cm} \hbox{I have reviewed this Amendment No. 1 to Annual Report on Form 10-K/A of Wave Life Sciences Ltd.} \\$
- 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.

Date: April 29, 2019

/s/ Keith C. Regnante

Keith C. Regnante Chief Financial Officer (principal financial officer and principal accounting officer)