# **UNITED STATES** SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

# **SCHEDULE 14A**

Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934

Filed by the Registrant ⊠ Filed by a Party other than the Registrant  $\Box$ 

Check the appropriate box:

Preliminary Proxy Statement

Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))

X Definitive Proxy Statement

Definitive Additional Materials

Soliciting Material Under Rule 14a-12

# WAVE LIFE SCIENCES LTD.

(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

Payment of Filing Fee (Check the appropriate box):

X No fee required.

Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.

1)	) Title	of each	class of	securities	to which	transaction	applies
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Aggregate number of securities to which transaction applies: 2)

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Total fee paid:

Fee paid previously with preliminary materials.

the previous filing by registration statement number, or the Form or Schedule and the date of its filing:

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# WAVE LIFE SCIENCES LTD. (Incorporated in the Republic of Singapore) (Company Registration Number 201218209G)

## NOTICE OF 2019 ANNUAL GENERAL MEETING OF SHAREHOLDERS

TIME: 11:00 a.m., Eastern Time

DATE: August 8, 2019

PLACE: Wave Life Sciences Ltd., 733 Concord Avenue, Cambridge, MA 02138

To Our Shareholders:

You are cordially invited to attend the 2019 Annual General Meeting of Shareholders of Wave Life Sciences Ltd. to be held at 11:00 a.m., Eastern Time, on Thursday, August 8, 2019 at 733 Concord Avenue, Cambridge, MA 02138. In this Notice, we refer to the 2019 Annual General Meeting of Shareholders as the "2019 AGM" and we refer to Wave Life Sciences Ltd. as "Wave," the "Company," "we," "us" and "our." Details regarding the 2019 AGM, the business to be conducted at the 2019 AGM, and information about Wave Life Sciences Ltd. that you should consider when you vote your shares are described in the attached proxy statement.

The 2019 AGM will be held for the following purposes:

# As Special Business

L.	(a) To	elect Paul B. Bolno, M.D., MBA to serve on the Board of Directors;	
			(Ordinary Resolution 1(a))
	(b)	To elect Christian Henry to serve on the Board of Directors;	
			(Ordinary Resolution 1(b))
	(c)	To elect Peter Kolchinsky, Ph.D. to serve on the Board of Directors;	
			(Ordinary Resolution 1(c))
	(d)	To elect Koji Miura to serve on the Board of Directors;	
			(Ordinary Resolution 1(d))
	(e)	To elect Adrian Rawcliffe to serve on the Board of Directors;	(Ordinary Resolution 1(e))
	(f)	To elect Ken Takanashi to serve on the Board of Directors;	
	(1)		(Ordinary Resolution 1(f))
	(g)	To elect Gregory L. Verdine, Ph.D. to serve on the Board of Directors;	(
	(0)		(Ordinary Resolution 1(g))

# As Ordinary Business

2. To approve the re-appointment of KPMG LLP to serve as our independent registered public accounting firm and independent Singapore auditor for the year ending December 31, 2019, and to authorize the Audit Committee of the Board of Directors to fix KPMG LLP's remuneration for services provided through the date of our 2020 Annual General Meeting of Shareholders;

(Ordinary Resolution 2)

3. To approve the Company's payment of cash and equity-based compensation to non-employee directors for service on the Board of Directors and its committees, in the manner and on the basis as set forth under "Proposal 3: Non-Employee Directors' Compensation" in the attached proxy statement;

(Ordinary Resolution 3)

# As Special Business

- 4. Pursuant to the provisions of Section 161 of the Singapore Companies Act (the "Singapore Companies Act"), Chapter 50, and also subject to the provisions of the Singapore Companies Act and our Constitution, authority be, and hereby is, given to our Board of Directors:
  - (a) to:
    - (i) allot and issue ordinary shares in our capital; and/or
    - (ii) make or grant offers, agreements, options or other instruments (including the grant of awards or options pursuant to our equitybased incentive plans and agreements in effect from time to time) that might or would require ordinary shares to be allotted and issued, whether such allotment or issuance would occur during or after the expiration of this authority (including but not limited to, the creation and issuance of warrants, rights, units, purchase contracts, debentures or other instruments (including debt instruments) convertible into or exercisable for ordinary shares),

at any time to and/or with such persons and upon such terms and conditions, for such purposes and for consideration as our directors may in their sole discretion deem fit, and with such rights or restrictions as our directors may think fit to impose and as are set forth in our Constitution; and

(b) to allot and issue ordinary shares in our capital pursuant to any offer, agreement, option or other agreement made, granted or authorized by our directors while this resolution was in effect, regardless of whether the authority conferred by this resolution may have ceased to be in effect at the time of the allotment and issuance,

and that such authority, if approved by our shareholders, shall continue in effect until the earlier of the conclusion of our 2020 Annual General Meeting of Shareholders or the expiration of the period within which our 2020 Annual General Meeting of Shareholders is required by law to be held;

# (Ordinary Resolution 4)

5. To approve the Company's 2019 Employee Share Purchase Plan, and for our Board of Directors to be authorized to: (a) grant options to purchase ordinary shares in accordance with the provisions of the 2019 Employee Share Purchase Plan; and (b) allot and issue from time to time such number of fully paid-up ordinary shares as may be required to be issued pursuant to the exercise of options under the 2019 Employee Share Purchase Plan;

# (Ordinary Resolution 5)

6. To approve, on a non-binding, advisory basis only, the compensation of our named executive officers:

"RESOLVED, on a non-binding, advisory basis only, that the compensation paid to the named executive officers of the Company, as disclosed pursuant to the compensation disclosure rules of the Securities and Exchange Commission, including the Compensation Discussion and Analysis, the compensation tables and the related material disclosed in this proxy statement, is hereby APPROVED."

This non-binding advisory resolution is being proposed to shareholders as required pursuant to the requirements of Section 14A of the Securities Exchange Act of 1934, as amended, or the "Exchange Act." The shareholders' vote on this proposal is solely advisory and non-binding in nature, will have no legal effect for purposes of Singapore law and will not be enforceable against our Company or our Board of Directors;

# (Non-Binding Advisory Resolution 6)

7. To approve, on a non-binding, advisory basis only, the frequency of holding future shareholder advisory votes on the compensation of our named executive officers:

"RESOLVED, on a non-binding, advisory basis only, that the shareholders recommend that a non-binding, advisory vote to approve the compensation paid to the named executive officers of

the Company be put to shareholders for their consideration with one of the following three frequencies:

- (a) every year;
- (b) every two years; or
- (c) every three years."

This non-binding advisory resolution is being proposed to shareholders as required pursuant to the requirements of Section 14A of the Exchange Act. The shareholders' vote on this proposal is solely advisory and non-binding in nature, will have no legal effect for purposes of Singapore law and will not be enforceable against our Company or our Board of Directors; and

#### (Non-Binding Advisory Resolution 7)

8. To transact such other business as may properly come before the 2019 AGM and all adjournments or postponements thereof.

The Board of Directors recommends the approval of each of the first six proposals and every year on proposal 7.

All of the above proposals should be read in conjunction with the attached proxy statement, which sets out the specific parameters of the proposals.

Each of the matters to be voted on at the 2019 AGM (other than Proposals 6 and 7, which are only non-binding advisory resolutions) may be passed by ordinary resolution pursuant to our Constitution.

#### **Notes About the Annual General Meeting of Shareholders**

*Eligibility to Vote at 2019 AGM.* The Board of Directors has fixed the close of business on June 17, 2019 as the record date for determining those shareholders who will be entitled to receive copies of this Notice and the attached proxy statement. However, under Singapore law, only registered holders of our ordinary shares (i.e., persons whose names appear on the Register of Members of the Company maintained in accordance with Section 190 of the Singapore Companies Act), or "shareholders of record," on the date of the 2019 AGM, August 8, 2019, will be entitled to vote at the 2019 AGM. If you have sold or transferred any of your ordinary shares after June 17, 2019 and prior to the 2019 AGM, you should immediately forward this Notice and the attached proxy statement and proxy card to the purchaser or transferee of such shares, or to the bank, broker or agent through whom the sale of such shares was effected, for onward transmission to the purchaser or transferee. If you hold shares other than in registered form as a shareholder of record, and instead hold your shares as, or through, a participant in DTC (i.e., in "street name"), we understand that in order for your vote to be counted at the 2019 AGM, you must also have been a holder of shares at, and with effect from, June 17, 2019. As of June 17, 2019, we had 34,264,601 ordinary shares issued and outstanding.

*Proxies*. All shareholders of record as of the date of the 2019 AGM are cordially invited to attend the 2019 AGM or appoint a proxy to attend and vote in their place (referred to as a "legal proxy"). A legal proxy need not also be a shareholder of record. **Whether or not you plan to attend the 2019 AGM, we urge you to vote and submit your proxy card by mail in order to ensure the presence of a quorum.** A proxy card must be received by Vote Processing, c/o Broadridge, 51 Mercedes Way, Edgewood, NY 11717 not less than 48 hours before the time appointed for holding the 2019 AGM or within such other time as may be required by the Singapore Companies Act. Completion and submission of the proxy card shall not preclude a shareholder of record from attending and voting at the 2019 AGM. Any appointment of a legal proxy or proxies will be revoked if a shareholder of record attends and votes in person at the 2019 AGM, and in such event, we reserve the right to refuse to admit any person or persons appointed under the instrument of proxy or proxies to the meeting.

For the avoidance of doubt, the reference to "proxy" in this Notice does not mean a "legal proxy" entitled under Singapore law to attend and vote on behalf of a shareholder of record. The reference to "soliciting your proxy" means that a shareholder of record may appoint the persons identified on the proxy card as such

shareholder's legal proxies to vote in accordance with such shareholder's instructions given via proxy or to authorize such persons to vote freely.

*Beneficial or "Street Name" Holders.* If your shares are held in "street name" (i.e., in the name of a bank, broker or other shareholder of record), you will receive instructions from the shareholder of record. You must follow the instructions of the shareholder of record in order for your shares to be voted. If your shares are not registered in your own name and you plan to vote your shares in person at the 2019 AGM, you should contact your broker or agent to obtain a legal proxy or broker's proxy card and bring it to the 2019 AGM in order to vote as a legal proxy.

*Singapore Audited Accounts.* At the 2019 AGM, our shareholders will have the opportunity to discuss and ask questions regarding our Singapore audited accounts for the fiscal year ended December 31, 2018, together with the directors' statement and independent auditors' report thereon, in compliance with the laws of Singapore. Shareholder approval of our Singapore audited accounts is not being sought by the attached proxy statement and will not be sought at the 2019 AGM.

When you have finished reading the attached proxy statement, you are urged to vote in accordance with the instructions set forth in the proxy statement. We encourage you to vote by proxy so that your shares will be represented and voted at the 2019 AGM, whether or not you can attend.

Thank you for your continued support of Wave Life Sciences Ltd.

BY ORDER OF THE BOARD OF DIRECTORS

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

June 26, 2019

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### IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS FOR THE ANNUAL GENERAL MEETING OF SHAREHOLDERS TO BE HELD ON AUGUST 8, 2019

The Notice, this proxy statement and our 2018 annual report to shareholders are available for viewing, printing and downloading at https://materials.proxyvote.com/. You can elect to receive distributions of our proxy statements and annual reports to shareholders for future annual general meetings by electronic delivery. For specific instructions on making such an election, please refer to the instructions on the proxy card or voting instruction form.

At no charge, we are providing each person from whom a proxy is solicited a copy of, and access to, our Annual Report on Form 10-K for the fiscal year ended December 31, 2018, as amended, or our "2018 Form 10-K." Additionally, you can find a copy of our 2018 Form 10-K on the website of the Securities and Exchange Commission, or the "SEC," at www.sec.gov, or in the "For Investors & Media" section of our website at http://ir.wavelifesciences.com/ under the heading "Financial Information." You may also obtain a printed copy of our 2018 Form 10-K, free of charge, from us by sending a written request to Investor Relations, Wave Life Sciences Ltd., 733 Concord Avenue, Cambridge, MA 02138 or by email to IR@wavelifesci.com. Exhibits to our 2018 Form 10-K will be provided upon written request and payment of an appropriate processing fee.

The information provided on our website (www.wavelifesciences.com) is referenced in this proxy statement for information purposes only. The information on our website shall not be deemed to be a part of or incorporated by reference into this proxy statement or any other filings we make with the SEC or any solicitation of proxies by us.

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# WAVE LIFE SCIENCES LTD. 733 CONCORD AVENUE CAMBRIDGE, MA 02138

# PROXY STATEMENT FOR THE WAVE LIFE SCIENCES LTD. 2019 ANNUAL GENERAL MEETING OF SHAREHOLDERS TO BE HELD ON AUGUST 8, 2019

This proxy statement, along with the accompanying Notice of 2019 Annual General Meeting of Shareholders, or the "Notice," contains information about the 2019 Annual General Meeting of Shareholders of Wave Life Sciences Ltd. (including any adjournments or postponements thereof), which we refer to in this proxy statement as the "2019 AGM." We are holding the 2019 AGM at 11:00 a.m., Eastern Time, on Thursday, August 8, 2019, at 733 Concord Avenue, Cambridge, MA 02138.

In this proxy statement, we refer to Wave Life Sciences Ltd. as "Wave," the "Company," "we," "us" and "our."

This proxy statement relates to the solicitation of proxies by our Board of Directors for use at the 2019 AGM.

On or about June 28, 2019, we began sending this proxy statement, the Notice and the enclosed proxy card to shareholders of record as of June 17, 2019.

Although not part of this proxy statement, we are also sending, along with this proxy statement, our 2018 annual report to shareholders, which includes our financial statements for the fiscal year ended December 31, 2018. Except as otherwise stated herein, all monetary amounts in this proxy statement have been presented in U.S. dollars.

# IMPORTANT INFORMATION ABOUT THE ANNUAL GENERAL MEETING OF SHAREHOLDERS AND VOTING

#### Why is the Company Soliciting My Proxy?

The Board of Directors of Wave Life Sciences Ltd. (the "Board" or our "Board") is soliciting your proxy to vote at the 2019 Annual General Meeting of Shareholders (the "2019 AGM") to be held at 733 Concord Avenue, Cambridge, MA 02138 on Thursday, August 8, 2019, at 11:00 a.m., Eastern Time, and any adjournments or postponements of the 2019 AGM. This proxy statement, along with the Notice, summarizes the purposes of the meeting and the information you need to know to vote at the 2019 AGM.

We have made available to you on the Internet or have sent you this proxy statement, the Notice, the proxy card, and our 2018 annual report to shareholders because you owned ordinary shares of Wave Life Sciences Ltd. on the record date for determining those shareholders who will be entitled to receive copies of the Notice and this proxy statement. We began distributing the proxy materials to shareholders on or about June 28, 2019.

For the avoidance of doubt, the reference to "proxy" in this proxy statement does not mean a "legal proxy" entitled under Singapore law to attend and vote on behalf of a shareholder of record. The reference to "soliciting your proxy" means that a shareholder of record may appoint the persons identified on the proxy card as such shareholder's legal proxy to vote in accordance with such shareholder's instructions given via proxy or to authorize such persons to vote freely.

#### Who Can Vote?

The Board has fixed the close of business on June 17, 2019 as the record date for determining those shareholders who will be entitled to receive copies of the Notice and this proxy statement. However, under Singapore law, only registered holders of our ordinary shares, or "shareholders of record," on the date of the 2019 AGM, August 8, 2019, will be entitled to vote at the 2019 AGM. If you have sold or transferred any of your ordinary shares after the record date of June 17, 2019 and prior to the 2019 AGM, you should immediately forward the Notice, this proxy statement and the proxy card to the purchaser or transferee of such shares, or to the bank, broker or agent through whom the sale of such shares was effected, for onward transmission to the purchaser or transferee. If you hold shares other than in registered form as a shareholder of record, and instead hold your shares as, or through, a participant in DTC (i.e., in "street name"), we understand that in order for your vote to be counted at the 2019 AGM. (represented by a shareholder of record), you must also have been a holder of shares at, and with effect from, June 17, 2019 through the date of the 2019 AGM. As of June 17, 2019, we had 34,264,601 ordinary shares issued and outstanding.

All shareholders of record as of the date of the 2019 AGM are cordially invited to attend the 2019 AGM or appoint a legal proxy to attend and vote in their place. A legal proxy need not also be a shareholder of record. **Whether or not you plan to attend the 2019 AGM, we urge you to vote and submit your proxy card by mail in order to ensure the presence of a quorum.** A proxy card must be received by Vote Processing, c/o Broadridge, 51 Mercedes Way, Edgewood, NY 11717 not less than 48 hours before the time appointed for holding the 2019 AGM or within such other time as may be required by the Singapore Companies Act. Completion and submission of the proxy card shall not preclude a shareholder of record from attending and voting at the 2019 AGM. Any appointment of a legal proxy or proxies will be revoked if a shareholder of record attends the 2019 AGM in person, and in such event, we reserve the right to refuse to admit any person or persons appointed under the instrument of proxy or proxies to the meeting. Shareholders of record may change or revoke their legal proxies at any time before their shares are voted at the 2019 AGM. For instructions on how to change or revoke your legal proxy, see "May I Change or Revoke My Proxy?" below.

## How Many Votes Do I Have?

Each ordinary share that you own or represent as a legal proxy entitles you to one vote at the 2019 AGM. The Series A preferred shares of the Company are not entitled to vote on any of the matters being proposed at the 2019 AGM.

#### How Do I Vote?

If you are not planning to attend the 2019 AGM, we urge you to vote by proxy. All shares represented by valid proxies that we receive through this solicitation, and that are not revoked, will be voted in accordance with your instructions on the proxy card. You may specify whether your shares should be voted for, against or abstain for each nominee for director, and whether your shares should be voted for, against or abstain with respect to each of the other proposals. If you properly submit a proxy card without giving specific voting instructions, your shares will be voted in accordance with the Board's recommendations as noted below, except as described under "Will My Shares be Voted if I Do Not Vote or Provide Voting Instructions?" Voting by proxy will not affect your right to attend the 2019 AGM. If you are a shareholder of record such that your shares are registered directly in your name through our transfer agent, Computershare Trust Company, N.A., or you have share certificates registered in your name, you may vote:

- **By mail.** If you received a proxy card by mail, you can vote by mail by completing, signing, dating and returning the proxy card as instructed on the card. If you sign the proxy card but do not specify how you want your shares voted, they will be voted in accordance with the Board's recommendations as noted below.
- In person at the meeting. If you attend the meeting, you may vote by completing a ballot, which will be available at the meeting.

A proxy card must be received by Vote Processing, c/o Broadridge, 51 Mercedes Way, Edgewood, NY 11717 not less than 48 hours before the time appointed for holding the 2019 AGM or within such other time as may be required by the Singapore Companies Act.

If your shares are held in "street name" (i.e., in the name of a bank, broker or other shareholder of record), you will receive instructions from the shareholder of record. You must follow the instructions of the shareholder of record in order for your shares to be voted. If your shares are not registered in your own name and you plan to vote your shares in person at the 2019 AGM, you should contact your broker or agent to obtain a legal proxy or broker's proxy card and bring it to the 2019 AGM in order to vote.

## How Does the Board of Directors Recommend That I Vote on the Proposals?

The Board of Directors recommends that you vote as follows:

- "<u>FOR</u>" each of the resolutions for the election of the nominees for director;
- "<u>FOR</u>" the approval of the re-appointment of KPMG LLP as our independent registered public accounting firm and independent Singapore auditor for the year ending December 31, 2019 and the authorization of the Audit Committee of the Board of Directors to fix KPMG LLP's remuneration for services provided through the date of our 2020 Annual General Meeting of Shareholders;
- "FOR" the approval of cash and equity-based compensation to be paid to the non-employee members of the Board of Directors for service on the Board of Directors and its committees, as described under "Proposal 3: Non-Employee Directors' Compensation";
- "FOR" the authorization of the Board of Directors to allot and issue ordinary shares of the Company;
- "FOR" the approval of the 2019 Employee Share Purchase Plan;
- "FOR" the non-binding advisory resolution on compensation of our named executive officers, as disclosed in this proxy statement; and
- "FOR" the non-binding advisory resolution on the frequency of holding an advisory vote on the compensation of our named executive officers every year.

If any other matter is presented at the 2019 AGM, your proxy card provides that your shares will be voted by the proxy holder listed in the proxy card in accordance with his or her judgment. At the time this proxy

statement was first made available, we knew of no matters that needed to be acted on at the 2019 AGM, other than those discussed in this proxy statement.

#### May I Change or Revoke My Proxy?

If you give us your proxy, you may change or revoke it at any time before the 2019 AGM in any one of the following ways:

- if you received a proxy card, by signing and submitting a new proxy card with a date later than your previously delivered proxy card, which must be received by Vote Processing, c/o Broadridge, 51 Mercedes Way, Edgewood, NY 11717 not less than 48 hours before the time appointed for holding the 2019 AGM or within such other time as may be required by the Singapore Companies Act; or
- by attending the 2019 AGM in person and voting in person. Attending the 2019 AGM in person will not in and of itself revoke a previously submitted proxy. You must specifically request at the 2019 AGM that your previously submitted proxy be revoked.

Your most current vote is the one that will be counted.

## What if I Receive More Than One Proxy Card?

You may receive more than one proxy card if you hold any of our ordinary shares in more than one account, which may be in registered form or held in street name. Please vote in the manner described above under "How Do I Vote?" for each account to ensure that all of your shares are voted.

#### Will My Shares be Voted if I Do Not Vote or Provide Voting Instructions?

If your shares are registered in your name or if you have share certificates, they will not be counted if you do not vote as described above under "How Do I Vote?" If your shares are held in street name and you do not provide voting instructions to the bank, broker or other nominee that holds your shares as described above, the bank, broker or other nominee that holds your shares has the authority to vote your unvoted shares without receiving instructions from you on Proposal 2: the approval of the re-appointment of KPMG LLP as our independent registered public accounting firm and independent Singapore auditor and the authorization of KPMG's remuneration. We encourage you to provide voting instructions to your bank, broker or other nominee to ensure your shares will be voted at the 2019 AGM and in the manner you desire. A "broker non-vote" will occur if your broker cannot vote your shares on a particular matter because it has not received instructions from you and does not have discretionary voting authority on that matter or because your broker chooses not to vote on a matter for which it does have discretionary voting authority.

#### What Vote is Required to Approve Each Proposal and How are Votes Counted?

**Proposal 1: Elect Directors** 

Each nominee for director who receives the affirmative vote of a majority of the votes cast by the holders of ordinary shares voting either in person or by proxy at the 2019 AGM will be elected to serve until the next annual general meeting of shareholders (meaning the number of shares voted "for" a nominee must exceed the number of shares voted "against" such nominee).



	You may vote either "for" or "against" each of the nominees, or you may "abstain" from voting for one or more nominees. If you "abstain" from voting with respect to one or more nominees, your vote will have no effect on the election of such nominees. Brokerage firms do not have authority to vote customers' unvoted shares held by the firms in street name with respect to this proposal. As a result, any shares not voted by a customer will be treated as a broker non-vote. Such broker non-votes will have no effect on the results of this vote.
Proposal 2: Approve the Re-Appointment of Independent Registered Public Accounting Firm and Independent Singapore Auditor and Authorize the Auditor's Remuneration	The affirmative vote of a majority of the votes cast by holders of ordinary shares voting in person or by proxy at the 2019 AGM is required to approve the re-appointment of KPMG LLP as our independent registered public accounting firm and our independent Singapore auditor and to authorize the Audit Committee to fix the auditor's remuneration (meaning the number of shares voted "for" the proposal must exceed the number of shares voted "against" the proposal).
	You may vote either "for" or "against" or "abstain" from voting on this proposal. Abstentions will have no effect on the results of this vote. Brokerage firms have authority to vote customers' unvoted shares held by the firms in street name on this proposal. If a broker does not exercise this authority, such broker non-votes will have no effect on the results of this vote.
Proposal 3: Approve the Non-Employee Directors' Compensation	The affirmative vote of a majority of the votes cast by holders of ordinary shares voting in person or by proxy at the 2019 AGM is required to approve the non-employee directors' compensation (meaning the number of shares voted "for" the proposal must exceed the number of shares voted "against" the proposal).
	You may vote either "for" or "against" or "abstain" from voting on this proposal. Abstentions will have no effect on the results of this vote. Brokerage firms do not have authority to vote customers' unvoted shares held by the firms in street name with respect to this proposal. As a result, any shares not voted by a customer will be treated as a broker non-vote. Such broker non-votes will have no effect on the results of this vote.
Proposal 4: Authorize the Board to Allot and Issue Ordinary Shares of the Company	The affirmative vote of a majority of the votes cast by holders of ordinary shares voting in person or by proxy at the 2019 AGM is required to authorize the Board to allot and issue ordinary shares of the Company (meaning the number of shares voted "for" the proposal must exceed the number of shares voted "against" the proposal).
	You may vote either "for" or "against" or "abstain" from voting on this proposal. Abstentions will have no effect on the results of this vote. Brokerage firms do not have authority to vote customers' unvoted shares held by the firms in street name with respect to this proposal. As a result, any shares not voted by a customer will be treated as a broker non-vote. Such broker non-votes will have no effect on the results of this vote.

Proposal 5: Approve the 2019 Employee Share Purchase Plan	The affirmative vote of a majority of the votes cast by holders of ordinary shares voting in person or by proxy at the 2019 AGM is required to approve the 2019 Employee Share Purchase Plan (meaning the number of shares voted "for" the proposal must exceed the number of shares voted "against" the proposal).
	You may vote either "for" or "against" or "abstain" from voting on this proposal. Abstentions will have no effect on the results of this vote. Brokerage firms do not have authority to vote customers' unvoted shares held by the firms in street name with respect to this proposal. As a result, any shares not voted by a customer will be treated as a broker non-vote. Such broker non-votes will have no effect on the results of this vote.
Proposal 6: Approve a Non-Binding Advisory Resolution on the Compensation of our Named Executive Officers	This non-binding advisory resolution is being proposed to shareholders as required pursuant to Section 14A of the Exchange Act. The shareholders' vote on this proposal is solely advisory and non-binding in nature, will have no legal effect for purposes of Singapore law and will not be enforceable against our Company or our Board. For the avoidance of doubt, this is not an Ordinary Resolution.
	The affirmative vote of a majority of the votes cast by holders of ordinary shares voting in person or by proxy at the 2019 AGM is required to approve, on a non-binding, advisory basis only, the compensation of our named executive officers, as described in this proxy statement (meaning the number of shares voted "for" the proposal must exceed the number of shares voted "against" the proposal).
	You may vote either "for" or "against" or "abstain" from voting on this proposal. Abstentions will have no effect on the results of this vote. Brokerage firms do not have authority to vote customers' unvoted shares held by the firms in street name with respect to this proposal. As a result, any shares not voted by a customer will be treated as a broker non-vote. Such broker non-votes will have no effect on the results of this vote.
Proposal 7: Approve a Non-Binding Advisory Resolution on the Frequency of Holding an Advisory Vote on the Compensation of our Named Executive Officers	This non-binding advisory resolution is being proposed to shareholders as required pursuant to Section 14A of the Exchange Act. The shareholders' vote on this proposal is solely advisory and non-binding in nature, will have no legal effect for purposes of Singapore law and will not be enforceable against our Company or our Board. For the avoidance of doubt, this is not an Ordinary Resolution.
	Solely for the purposes of indicating the level of support of the shareholders for the frequency of holding an advisory vote on the compensation of our named executive officers – every year, every two years or every three years – the Compensation Committee and the Board will consider the frequency receiving the highest number of

affirmative votes cast out of the total number of votes cast on this proposal, to be the frequency approved by our shareholders (meaning the option for which the highest number of shares were voted "for" will be considered to be the "approved" option for the purposes of this non-binding advisory resolution).

You may vote "for" only ONE of the said three options, or choose to "abstain" from voting on any of the three options. Abstentions will have no effect on the results of this vote. Brokerage firms do not have authority to vote customers' unvoted shares held by the firms in street name with respect to this proposal. As a result, any shares not voted by a customer will be treated as a broker non-vote. Such broker non-votes will have no effect on the results of this vote.

#### Is Voting Confidential?

We will keep all the proxies, ballots and voting tabulations private. We only let our Inspector of Elections, a representative of Broadridge, examine these documents. Management will not know how you voted on a specific proposal unless it is necessary to meet legal requirements. However, Broadridge will forward to management any written comments you make, either on the proxy card or that you otherwise provide.

#### Where Can I Find the Voting Results of the 2019 AGM?

The preliminary voting results will be announced at the 2019 AGM, and we will publish preliminary results, or final results if available, in a Current Report on Form 8-K within four business days after the 2019 AGM. If final results are unavailable at the time we file the Form 8-K, then we will file an amended report on Form 8-K to disclose the final voting results within four business days after the final voting results within four business days after the final voting results within four business days after the final voting results within four business days after the final voting results are unavailable at the final voting results are unavailable at the final voting results are known.

#### What Are the Costs of Soliciting these Proxies?

We will pay all of the costs of soliciting these proxies. Our directors and employees may solicit proxies in person or by telephone, fax or email. We will pay these employees and directors no additional compensation for these services. We will ask banks, brokers and other institutions, nominees and fiduciaries to forward these proxy materials to their principals and to obtain authority to execute proxies. We will then reimburse them for their expenses.

# What Constitutes a Quorum for the 2019 AGM?

In order to hold the meeting, there must be a quorum. The presence, in person or by proxy, of at least two shareholders holding in aggregate at least a majority of all issued and outstanding ordinary shares entitled to vote at the 2019 AGM is necessary to constitute a quorum at the 2019 AGM. Votes of shareholders of record who are present in person or represented by proxy at the 2019 AGM, abstentions and broker non-votes are counted for purposes of determining whether a quorum exists.

#### Attending the 2019 AGM

The 2019 AGM will be held at 11:00 a.m., Eastern Time, on Thursday, August 8, 2019 at 733 Concord Avenue, Cambridge, MA 02138. When you arrive, signs will direct you to the appropriate meeting rooms. You need not attend the 2019 AGM in person in order to vote, provided that your proxy is present to represent your vote.

#### **Singapore Statutory Financial Statements**

Our Singapore audited accounts for the fiscal year ended December 31, 2018, prepared in conformity with the provisions of the laws of Singapore, and the accompanying directors' statement and the independent auditors' report thereon are required under Singapore law and our Constitution to be provided to shareholders for discussion at the 2019 AGM. We refer to such materials herein collectively as the "Singapore Statutory Financial Statements." The Singapore Statutory Financial Statements are provided as <u>Appendix A</u> to this proxy statement solely to satisfy this requirement. At the 2019 AGM, our shareholders will have the opportunity to discuss and ask questions regarding the Singapore Statutory Financial Statements. Shareholder approval of the Singapore Statutory Financial Statements is not being sought by this proxy statement for the 2019 AGM and will not be sought at the 2019 AGM. The Singapore Statutory Financial Statements shall not be deemed to be "soliciting material" or to be "filed" with the Securities and Exchange Commission, or the "SEC," nor shall such information be incorporated by reference into any filings under the Securities Act of 1933, as amended, or the "Securities Act," or under the Exchange Act, or be subject to the liabilities of Section 18 of the Exchange Act, except to the extent that we specifically incorporate this information by reference into any such filing.

# 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 June 10, 2019 for (i) the executive officers named in the Summary Compensation Table appearing elsewhere in this proxy statement, (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 following June 10, 2019 pursuant to the exercise of options, the vesting of restricted share units 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 34,261,602 ordinary shares outstanding on June 10, 2019.

	Ordinary Shares Beneficially Owned		
Name	Shares	Percent	
5% Beneficial Owners			
RA Capital Management, LLC <sup>(1)</sup>	7,775,207	22.7%	
Shin Nippon Biomedical Laboratories, Ltd. <sup>(2)</sup>	5,885,478	15.4%	
Redmile Group, LLC <sup>(3)</sup>	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 <sup>(6)</sup>	916,297	2.6%	
Keith C. Regnante <sup>(7)</sup>	75,106	*	
Christopher Francis, Ph.D.(8)	95,221	*	
Michael Panzara, M.D., MPH <sup>(9)</sup>	126,837	*	
Chandra Vargeese, Ph.D. <sup>(10)</sup>	280,127	*	
Christian Henry <sup>(11)</sup>	29,999	*	
Peter Kolchinsky, Ph.D.(12)	7,802,207	22.8%	
Koji Miura(13)	27,000	*	
Adrian Rawcliffe(14)	29,249	*	
Ken Takanashi(15)	5,912,478	15.5%	
Gregory L. Verdine, Ph.D.(16)	619,842	1.8%	
All current directors and executive officers as a			
group (11 individuals) <sup>(17)</sup>	15,914,363	39.7%	

<sup>\*</sup> Represents less than 1% of ordinary shares outstanding on June 10, 2019.

(1) 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.

- (2) 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 USA has pledged 286,663 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 December 28, 2016, between SNBL and Kagoshima Bank. SNBL has pledged 938,846 ordinary shares for the benefit of 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 28F, 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) 704,113 ordinary shares underlying options exercisable within 60 days of June 10, 2019.
- (7) Consists of (i) 3,786 ordinary shares held by Mr. Regnante and (ii) 71,320 ordinary shares underlying options exercisable within 60 days of June 10, 2019.
- (8) Consists of (i) 5,718 ordinary shares held by Dr. Francis and (ii) 89,503 ordinary shares underlying options exercisable within 60 days of June 10, 2019.
- (9) Consists of (i) 13,813 ordinary shares held by Dr. Panzara and (ii) 113,024 ordinary shares underlying options exercisable within 60 days of June 10, 2019.
- (10) Consists of (i) 7,220 ordinary shares held by Dr. Vargeese and (ii) 272,907 ordinary shares underlying options exercisable within 60 days of June 10, 2019.
- (11) Consists of ordinary shares underlying options exercisable within 60 days of June 10, 2019.

- (12) See Footnote (1) above. Also consists of 27,000 ordinary shares underlying options exercisable within 60 days of June 10, 2019 held by Dr. Kolchinsky.
- (13) Consists of ordinary shares underlying options exercisable within 60 days of June 10, 2019.
- (14) Consists of ordinary shares underlying options exercisable within 60 days of June 10, 2019.
- (15) See Footnote (2) above. Also consists of 27,000 ordinary shares underlying options exercisable within 60 days of June 10, 2019 held by Mr. Takanashi.
- (16) Consists of (i) 60,039 ordinary shares held by Dr. Verdine and (ii) 559,803 ordinary shares underlying options exercisable within 60 days of June 10, 2019.
- (17) Consists of (i) 1,950,918 ordinary shares underlying options exercisable within 60 days of June 10, 2019, held by our directors and executive officers, (ii) 10,062,097 outstanding 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 entities affiliated with one of our directors.

## MANAGEMENT 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 currently consists of seven members and each of our directors is elected annually.

On June 3, 2019, our Board accepted the recommendation of the Nominating and Corporate Governance Committee and voted to nominate Paul B. Bolno, M.D., MBA, Christian Henry, Peter Kolchinsky, Ph.D., Koji Miura, Adrian Rawcliffe, Ken Takanashi, and Gregory L. Verdine, Ph.D., each currently a director of the Company, for election at the 2019 AGM. If each such nominee is elected, he will serve on our Board until our 2020 Annual General Meeting of Shareholders and until his successor has been elected and qualified.

Set forth below are the names of the directors (and who are also all of the persons nominated as directors), their ages as of June 10, 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 proxy statement that each person listed below should serve as a director is set forth below.

Age	Position/Title
45	President, Chief Executive Officer and Director
51	Chairman of the Board
42	Director
70	Director
47	Director
55	Director
60	Director
	45 51 42 70 47 55

*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. Due to the Singapore Companies Act requirement that we have at least one director who is ordinarily resident in Singapore in office at all times and the sole resident director cannot resign or step down unless there is at least one other resident director, in the event that Mr. Miura is not elected at the 2019 AGM, he will continue in office after the 2019 AGM as a member of our Board until his qualifying successor (i.e., a Singapore resident director) is appointed.

#### **Director Independence**

Even for a newly public company, our Board believes that independence is one important component of a high-functioning board capable of objective decision-making that represents the long-term interests of shareholders and the Company. Since the Company's initial public offering less than four years ago, our Board has enhanced its independence by replacing two previous directors—a founder and a representative of an investor—with two directors, who are independent and not affiliated with any of our principal shareholders, Christian Henry and Adrian Rawcliffe, and also enhanced its independent leadership by appointing Mr. Henry as its independent Chairman. Our Board is committed to ensuring it reflects an appropriate level of independence in conjunction with the combination of qualifications, qualities and skills required to exercise its duties and responsibilities and serve the best interests of the Company and its shareholders. In accordance with our Corporate Governance Guidelines and Nasdaq rules, we hold executive sessions of our independent directors in conjunction with our regularly scheduled board meetings and otherwise as appropriate. In addition, our Compensation Committee meets in executive session with no members of management present, as needed or helpful, to address various compensation matters, including deliberations regarding our Chief Executive Officer's performance and compensation.

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.

## **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. One of our directors attended our 2018 Annual General Meeting of Shareholders, which was held on August 7, 2018. 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 and independent Singapore auditor. 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 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. For more information regarding the roles and responsibilities of the Compensation Committee, see below under "Executive Officer and Director Compensation — Compensation Discussion and Analysis."

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 Nominating and Corporate Governance Committee is also authorized by its charter to retain search firms to identify director candidates. 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. Diversity on our Board is highly valued and is actively considered in the nomination process as well as in the Board's annual
  performance evaluation (see "Annual Performance Evaluation of the Board" below).
- 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 is reflected on our Board, and we believe that our current Board represents diversity of thought, background and experience, as well as diversity of personal characteristics such as ethnicity and age. As discussed in more detail below under "Annual Performance Evaluation of the Board," the Board is committed to seeking out highly qualified women and minority candidates, as well as candidates with diverse backgrounds, skills and experiences as part of each search for qualified directors the Company undertakes.

A copy of the Nominating and Corporate Governance Committee's written charter and our Corporate Governance Guidelines, which set forth our nominee requirements are 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 2020 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 the 2019 AGM. All shareholder proposals should be marked for the attention of General Counsel, Wave Life Sciences Ltd., 733 Concord Avenue, Cambridge, MA 02138.

# **Annual Performance Evaluation of the Board**

Our Board recognizes that a thorough, constructive evaluation process enhances its effectiveness and is an essential element of good corporate governance. Accordingly, the Nominating and Corporate Governance Committee oversees an annual Board self-evaluation to determine whether the Board and its committees and members have the right skills, experience, backgrounds, perspectives and processes, and are functioning effectively. The Nominating and Corporate Governance Committee determines the nature of the evaluation, supervises the conduct of the evaluation and prepares or commissions the preparation of an assessment of the Board's performance, to be discussed with the Board. The Board uses information provided through the evaluation process to improve its effectiveness.

To further enhance our board governance, the Chairman of the Board and our Nominating and Corporate Governance Committee engaged a third party to conduct the annual board performance evaluation for 2018. Although this is not a common practice at our stage of development, the Chairman, with the support of the Nominating and Corporate Governance Committee and the full Board, determined that an assessment by an experienced, objective, outside party at this stage of the Board's evolution would serve us well in optimizing board effectiveness.

The 2018 board evaluation included individual feedback sessions with management and board members conducted by the third-party board evaluation expert, with a focus on assessing individual director, board committee, and full board performance. The findings of the 2018 board evaluation were reviewed with the Board at our December 2018 year-end Board meeting in a session led by the Chairman of the Board and assisted by the third-party evaluation expert. Thereafter, the Board created and prioritized an action plan to address the findings of the 2018 board evaluation. In addition, the Chairman conducted additional feedback sessions with individual Board members. The Nominating and Corporate Governance Committee reviews the action plan with the Board throughout the year to evaluate progress.

One key action item arising from the 2018 board evaluation related to board recruitment. While the composition of our Board was found to represent an effective combination of skills and experience, an increase in diversity, particularly gender diversity, was recommended to enhance the Board's perspective. Our Board endorsed this recommendation and has amended the Company's Corporate Governance Guidelines to provide that in every director search undertaken by the Company, the candidate slates would include gender and ethnic diversity. In addition, our Board resolved to make a good faith effort to seek to nominate at least one female director by the end of December 2020. In addition, the 2018 board evaluation recommended that our Board recruit additional members with biopharmaceutical company drug development operating experience. The Nominating and Corporate Governance Committee selected and retained a search firm in early 2019 and is actively seeking qualified candidates to address these recommendations. As the Company continues its relatively nascent evolution as a public company, enhancing the diversity and relevant experience of our Board will remain

an important component in the action plan towards ensuring the Company maintains an experienced, inclusive, high-functioning board with a broad range of viewpoints and independent thinking.

# **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 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 as appropriate, including when a matter rises to the level of a material or enterprise level risk.

# **Corporate Sustainability Matters**

The Company's vision is to enable every patient with a genetic disease to have access to life-changing treatments in their lifetime. We understand that delivering on our vision over the long-term requires a focus on corporate sustainability, including environmental, social and governance ("ESG") considerations. As we build a world-class organization to develop a new era of oligonucleotide therapeutics, we expect to consider and increasingly provide transparency around the ESG factors we consider to be material to the Company.

As a rapidly growing, clinical-stage genetic medicines company, we are not yet in a position to implement a broad-based sustainability program. Nonetheless, our Board-approved goals are inspired by our commitment to maintain a patient-centric approach in everything we do and incorporate certain ESG factors. Our corporate goals focus on executing on our current pipeline of programs/medicines for patients; building for our future and expanding upon our current capabilities to develop life-changing treatments for patients; and further developing and retaining our employees by providing them with robust training and development opportunities to strengthen their workforce skills and capabilities, all while strengthening our culture and organization. The Company's investment in human capital management, our patient advocacy and community outreach efforts, along with our commitment to implementing environmental sustainability initiatives, are at the core of our corporate goals and what we believe in as a company.

Human capital management is as an essential component of our strategy for long-term value creation as well as risk mitigation in the talent-constrained, highly competitive biopharmaceutical industry. The Company has adopted a forward-thinking philosophy that encompasses not only the work that we do, but also how we are building our culture and benefits. We strive to be the employer of choice for the employees on whom we—and by extension our shareholders —depend. The Company's active approach to human capital management values and promotes diversity, development, and equal opportunity, among many other factors. Our commitment to maintaining an excellent workplace means investing in ongoing opportunities for employee development in a diverse and inclusive environment in which each team member plays a unique and important role. As the enhancement of gender diversity on our Board is underway, gender diversity is well-established within our workforce. Despite the historical lack of institutional emphasis on the importance of girls and women focusing on education in science, technology, engineering and mathematics ("STEM") and the resulting disproportionate occupation by men in the STEM-educated talent pool, the Company has prioritized and hired a gender diverse workforce. As of June 10, 2019, women make up just over half of our global workforce (50.5%); and constitute a strong percentage of the Company's top two management tiers: 30% of our executive team members and 30% of our vice presidents. We believe that a gender diverse workforce not only positively impacts our performance and strengthens our culture, but it also cultivates an essential pipeline of experienced female leaders for management and board service.

Our community outreach is focused on better understanding patient needs by working with advocacy organizations, sponsorship of patient focused conferences and events, and listening to and learning from patients directly. We partner with patient advocacy groups and community members in the rare disease community to broaden understanding of the needs of these smaller patient populations, collaborate with them on the design of our clinical trials, and incorporate their perspectives in our drug development processes and overall corporate culture. Through our partnership with rare disease advocacy groups, we participate in charitable and other community activities that embody our values and commitment to these communities.

We are also committed to conducting business in a responsible manner that provides a safe workplace for our employees, protects the environment, and is consistent with being a good corporate neighbor. As we continue to expand our operations, we have initiated certain projects to begin tracking our environmental impact, and where feasible, have taken measures to increase our sustainability efforts.

The Company will continue to invest in its employees, culture, community partnerships and outreach, and environmental efforts, and anticipates reporting on other corporate sustainability measures over time.

# 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 June 10, 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.

Name	Age	<u>Title</u>
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.	58	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.

# EXECUTIVE OFFICER AND DIRECTOR 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 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 were no longer an emerging growth company and therefore, our 2018 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";
- A non-binding advisory vote on "say on pay" for executive compensation, which is Proposal 6 of this proxy statement; and
- A non-binding advisory vote on the frequency on which we will hold our "say on pay" vote, which is Proposal 7 of this 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 longterm 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	
Name	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		
Name	(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 "2018 Fiscal Year Grants 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 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 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 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:

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Name	2019 Base Salary	2019 Target Bonus (as a % of Base Salary)	Number of Shares Subject to Time- Based Restricted Share Unit Award	Number of Shares Subject to Performance- Based Restricted 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 elsewhere in this proxy statement, 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 our proxy statement.

Members of the Wave Life Sciences Ltd. Compensation Committee:

Christian Henry (Chairman) Peter Kolchinsky Ken Takanashi

#### **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.

Name and Principal Position	Year	Salary (\$)	Bonus (\$)	Share Awards (\$)(1)	Option Awards (\$)(2)	Non-Equity Incentive Plan Compensation (\$)	All Other Compensation (\$)(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. Senior Vice President, Corporate Development,	2018	363,000	—	520,650	668,510	129,591	540	1,682,291
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

(1) 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.

(2) 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.

(3) 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	<u>Grant Date</u>	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 fouryear 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 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 then vested.

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#### **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 (#)	Sha Uni	urket Value of ares or Share its That Have ot Vested (\$)	
Paul B. Bolno, M.D., MBA	494,025		\$ 2.48	3/10/2025	<u></u>		~	
	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)	\$	1,144,539	
					54,500(5)	\$	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	2 225(4)	¢		
					3,225(4) 13,000(5)	\$ \$	135,579 546,520	
Christopher Francis, Ph.D.	40,997		\$ 2.48	3/10/2025	13,000(3)	ψ	540,520	
	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				
					5,175(4)	\$	217,557	
	211.004		¢ 0.40	2/10/2025	17,500(5)	\$	735,700	
Chandra Vargeese, Ph.D.	211,964 30,994	18,606(1)	\$ 2.48 \$18.79	3/10/2025 6/16/2026				
	8,937	10,563(2)	\$ 10.79 \$ 29.05	1/25/2027				
	0,937	35,000(3)	\$ 29.03 \$ 40.05	1/23/2027				
	_	55,000(0)	Φ40.00	1/23/2020	7,350(4)	\$	308,994	
					17,500(5)	\$	735,700	
					_,,000()	Ŷ	. 2.5,7 00	

(1) 25% 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.

(2) 25% 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.

(3) 25% 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.

- (4) 25% 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	

(1) 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.

(2) 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.

#### **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.

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 control bonus equal to a separation date; and continued payment of health insurance premiums at the Company's then normal rate of control bonus equal to a separation date; and continued payment of health insurance premiums at the Company's then normal rate 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 from such location; (ii) a material diminution in the 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.

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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 <sup>(1)</sup>	_	_	27,126,243	2,508,090
	Benefits and Perquisites	_	_	_	_
Keith C. Regnante	Base salary	350,000(2)	350,000(2)	—	350,000(2)
	Non-equity incentive compensation	_	_	_	140,000(3)
	Acceleration of unvested options and RSUs <sup>(1)</sup>	_	_	2,161,368	598,260
	Benefits and Perquisites	(4) 22,713	(4) 22,713	_	22,713(4)
Christopher Francis, Ph.D.	Base salary	—	—	—	—
	Non-equity incentive compensation	_	—	_	_
	Acceleration of unvested options and RSUs <sup>(1)</sup>	_	_	3,046,715	598,260
	Benefits and Perquisites	—	—	—	—
Michael Panzara, M.D., MPH	Base salary	430,300(2)	430,300(2)	—	430,300(2)
	Non-equity incentive compensation	_	_	_	172,120(3)
	Acceleration of unvested options and RSUs <sup>(1)</sup>	_	_	3,067,757	805,350
	Benefits and Perquisites	209(4)	209(4)	_	209(4)
Chandra Vargeese, Ph.D.	Base salary	_	_	_	_
	Non-equity incentive compensation	_	_		_
	Acceleration of unvested options and RSUs <sup>(1)</sup>	_	_	10,100,795	805,350
	Benefits and Perquisites	_	—	_	_

(1) 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.

(2) Twelve months of 2018 base salary continuation.

(3) Target non-equity incentive compensation for 2018.

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

#### **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.

Name	Fees Earned or Paid in Cash (\$) (1)	Option Awards (\$) (2)	All Other 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	—	244,547
Adrian Rawcliffe	44,402	200,145	—	244,547
Ken Takanashi	45,902	200,145	—	246,047
Gregory L. Verdine, Ph.D.	36,902	200,145	150,000(3)	387,047

(1) Amounts represent fees earned during 2018 under our non-employee director compensation policy.

(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
<u>Name</u> Christian Henry	<u>Options</u> 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

At our 2018 Annual General Meeting of Shareholders, our shareholders overwhelmingly approved our 2018 non-employee director compensation policy, under which our directors were compensated for their service as directors, including as members of the various committees of our Board on which they serve, for the Board service period that commenced on the date of our 2018 Annual General Meeting of Shareholders and runs through the date of our 2019 AGM. The terms of the 2018 non-employee director compensation policy are as follows:

- 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.

<sup>(2)</sup> 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.

- 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.

In Proposal 3, as required by Singapore law, we are now asking our shareholders to approve the terms of a 2019 non-employee director compensation policy, which would take effect on the date of our 2019 AGM for the Board service period commencing on the date of our 2019 AGM and running through the date on which our 2020 Annual General Meeting of Shareholders is held. Please see Proposal 3 below for the terms of the 2019 non-employee director compensation policy.

# 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.

Plan Categor <u>y</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	_	_	_
Total	4,425,111	\$ 19.47	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.

# **REPORT OF AUDIT COMMITTEE**

The Audit Committee of the Board of Directors has furnished the following report:

The Audit Committee assists the Board in overseeing and monitoring the integrity of our financial reporting process, compliance with legal and regulatory requirements and the quality of internal and external audit processes. The committee's role and responsibilities are set forth in the Audit Committee charter adopted by the Board, which is available on our website at www.wavelifesciences.com. This committee reviews and reassesses our charter annually and recommends any changes to the Board for approval. The Audit Committee is responsible for overseeing our overall financial reporting process, and for the appointment, compensation, retention, and oversight of the work of KPMG LLP. In fulfilling its responsibilities for the financial statements for the fiscal year ended December 31, 2018, the Audit Committee took the following actions:

- Reviewed and discussed the audited financial statements for the fiscal year ended December 31, 2018 with management and KPMG LLP, our independent registered public accounting firm and independent Singapore auditor;
- Discussed with KPMG LLP the matters required to be discussed in accordance with Auditing Standard No. 1301 *Communications with Audit Committees*; and
- Received written disclosures and the letter from KPMG LLP regarding its independence as required by applicable requirements of the Public Company Accounting Oversight Board regarding KPMG LLP communications with the Audit Committee and the Audit Committee further discussed with KPMG LLP their independence. The Audit Committee also considered the status of pending litigation, taxation matters and other areas of oversight relating to the financial reporting and audit process that the committee determined appropriate.

Based on the Audit Committee's review of the audited financial statements and discussions with management and KPMG LLP, the Audit Committee recommended to the Board that the audited financial statements be included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2018 for filing with the SEC.

**Members of the Audit Committee** Christian Henry, Chair Koji Miura Adrian Rawcliffe

# 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 Exchange Act in 2018 were filed on a timely basis.

# 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 under "Executive Officer and Director 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 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 sall 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 transaction in accordance with the related person transaction approval policy. Any such approval must be reported to the committee at the next regularly scheduled mee

#### 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 shareholders. 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 June 10, 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. The rights 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 June 10, 2019 under the Investors' Rights Agreement include the following related parties:

Name	Securities
Entities affiliated with Shin Nippon Biomedical Laboratories, Ltd. <sup>(1)</sup>	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") 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. 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 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. Since our entry into the guarantee in October 2015 and through the date of this proxy statement in June 2019, the sub-lessee has met its lease obligations to SNBL and we have not been required to make any payments under the guarantee. The guarantee is effective through August 2019, when the final lease payment is 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 guarantee made by us to SNBL. The maximum amount of the guarantee over the three-year and six-month sublease period averages to approximately \$172,000 per year, 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. Effective as of October 1, 2018, our contract research services arrangement with SNBL ended.

#### 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.

# **PROPOSAL 1: ELECTION OF DIRECTORS**

Our Constitution requires that each of our directors retire at each annual general meeting of our shareholders, and each retiring director is then eligible for re-election. The Board of Directors, acting on the recommendation of the Nominating and Corporate Governance Committee, has nominated each of Paul B. Bolno, M.D., MBA, Christian Henry, Peter Kolchinsky, Ph.D., Koji Miura, Adrian Rawcliffe, Ken Takanashi, and Gregory L. Verdine, Ph.D. for election at the 2019 AGM. Voting on the election of each nominee will be done separately. If each such nominee is elected, he will serve on our Board until our 2020 Annual General Meeting of Shareholders and until his successor has been elected and qualified.

Pursuant to 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. Due to the Singapore Companies Act requirement that we have at least one director who is ordinarily resident in Singapore in office at all times and the sole resident director cannot resign or step down unless there is at least one other resident director, in the event that Mr. Miura is not elected at the 2019 AGM, he will continue in office after the 2019 AGM as a member of our Board until his qualifying successor (i.e., a Singapore resident director) is appointed.

Each of the nominees is presently a director, and each has indicated a willingness to continue to serve as director, if elected. We have no reason to believe that any nominee will be unable or unwilling to serve as a director.

Each nominee for director who receives the affirmative vote of a majority of the votes cast by the holders of ordinary shares voting either in person or by proxy at the 2019 AGM will be elected (meaning the number of shares voted "for" a nominee must exceed the number of shares voted "against" such nominee).

THE BOARD OF DIRECTORS RECOMMENDS A VOTE "<u>FOR</u>" THE ELECTION OF PAUL B. BOLNO, M.D., MBA, CHRISTIAN HENRY, PETER KOLCHINSKY, PH.D., KOJI MIURA, ADRIAN RAWCLIFFE, KEN TAKANASHI AND GREGORY L. VERDINE, PH.D. AS DIRECTORS, AND PROXIES SOLICITED BY THE BOARD WILL BE VOTED IN FAVOR THEREOF UNLESS A SHAREHOLDER HAS INDICATED OTHERWISE ON THE PROXY CARD.

#### PROPOSAL 2: INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM AND INDEPENDENT SINGAPORE AUDITOR AND AUDITOR REMUNERATION

The Audit Committee has appointed KPMG LLP as our independent registered public accounting firm and independent Singapore auditor to audit our financial statements for the fiscal year ending December 31, 2019.

For the fiscal year ended December 31, 2018, KPMG LLP was our independent registered public accounting firm and independent Singapore auditor of our Singapore Statutory Financial Statements. Pursuant to Section 205(2) and 205(4) of the Singapore Companies Act, any re-appointment after the initial appointment of our independent Singapore auditor, or its subsequent removal, requires the approval of our shareholders. The Board proposes that the shareholders approve the re-appointment of KPMG LLP as our independent registered public accounting firm and independent Singapore auditor of our Singapore Statutory Financial Statements.

We expect that representatives of KPMG LLP will be present at the 2019 AGM, will be able to make a statement if they so desire, and will be available to respond to appropriate questions.

Pursuant to Section 205(16) of the Singapore Companies Act, the remuneration of a company's auditor shall be fixed by the shareholders in a general meeting or the shareholders may authorize directors to fix the remuneration. Our Board believes that it is appropriate for the Audit Committee, as part of its oversight responsibilities, to fix the auditor's remuneration. Our Board therefore also proposes that the shareholders authorize the Audit Committee to fix KPMG LLP's remuneration for services rendered as our independent registered public accounting firm and independent Singapore auditor through the date of our 2020 Annual General Meeting of Shareholders.

In deciding to re-appoint KPMG LLP, the Audit Committee reviewed auditor independence issues and existing commercial relationships with KPMG LLP and concluded that KPMG LLP has no commercial relationship with the Company that would impair its independence for the fiscal year ending December 31, 2019.

#### **Principal Accounting Fees and Services**

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

	2018	2017
Audit fees <sup>(1)</sup>	\$ 1,458,814	\$ 1,143,931
Audit-related fees(2)	—	
Tax fees(2)	—	
All other fees <sup>(2)</sup>		

- (1) 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 and independent Singapore auditor 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.
- (2) 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 and Independent Singapore Auditor

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 and independent Singapore auditor. 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 and independent Singapore auditor 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 and independent Singapore auditor 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 and independent Singapore auditor, 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 and independent Singapore auditor.

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 and independent Singapore auditor 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 and independent registered public accounting firm and independent Singapore auditor. 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.

The affirmative vote of a majority of the votes cast by holders of ordinary shares voting in person or by proxy at the 2019 AGM is required to approve the re-appointment of our independent registered public accounting firm and our independent Singapore auditor and to authorize the Audit Committee to fix the auditor's remuneration (meaning the number of shares voted "for" the proposal must exceed the number of shares voted "against" the proposal).

THE BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" THE APPROVAL OF THE RE-APPOINTMENT OF KPMG LLP AS OUR INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM AND INDEPENDENT SINGAPORE AUDITOR FOR THE YEAR ENDING DECEMBER 31, 2019 AND THE AUTHORIZATION OF THE AUDIT COMMITTEE TO FIX KPMG LLP'S REMUNERATION FOR SUCH SERVICES, AND PROXIES SOLICITED BY THE BOARD WILL BE VOTED IN FAVOR OF SUCH APPROVAL AND AUTHORIZATION UNLESS A SHAREHOLDER INDICATES OTHERWISE ON THE PROXY CARD.

# **PROPOSAL 3: NON-EMPLOYEE DIRECTORS' COMPENSATION**

Under the laws of Singapore, our shareholders must approve all cash and equity-based compensation paid by us to our directors for services rendered in their capacity as directors.

At our 2018 Annual General Meeting of Shareholders, our shareholders overwhelmingly approved our 2018 non-employee director compensation policy, under which our directors were compensated for their service as directors, including as members of the various committees of our Board on which they serve, for the Board service period that commenced on the date of our 2018 Annual General Meeting of Shareholders and runs through our 2019 AGM.

We are now asking our shareholders to approve the terms of our 2019 non-employee director compensation policy, which would take effect on the date of our 2019 AGM for the Board service period commencing on the date of our 2019 AGM and running through the date on which our 2020 Annual General Meeting of Shareholders is held.

Accordingly, we are seeking shareholder approval to provide payment of the following compensation pursuant to such 2019 non-employee director compensation policy to our non-employee directors for service on the Board and its committees for the Board service period commencing on the date of our 2019 AGM and running through the date on which our 2020 Annual General Meeting of Shareholders is held:

- <u>Board of Directors</u>: Annual cash compensation of \$40,000 to each non-employee director, other than the Chairman of the Board, and cash compensation of \$72,500 to the non-employee Chairman of the Board (an increase from the current \$65,000).
- <u>Audit Committee</u>: Additional annual cash compensation of \$16,000 to the Chairman of the Audit Committee (an increase from the current \$15,000), and \$8,000 to each member of the Audit Committee other than the Chairman (an increase from the current \$7,500), in each case provided that such person is an independent director.
- <u>Compensation Committee</u>: Additional annual cash compensation of \$12,000 to the Chairman of the Compensation Committee (an increase from the current \$10,000), and \$6,000 to each member of the Compensation Committee other than the Chairman (an increase from the current \$5,000) in each case provided that such person is an independent director.
- <u>Nominating and Corporate Governance Committee</u>: Additional annual cash compensation of \$10,000 to the Chairman of the Nominating and Corporate Governance Committee (an increase from the current \$8,000) and \$5,000 to each member of the Nominating and Corporate Governance Committee other than the Chairman (an increase from the current \$4,000) in each case provided that such person is an independent director.
- <u>Initial Equity Grant</u>: One-time equity grant upon initial appointment or election to the Board of an option to purchase 21,000 ordinary shares (an increase from the current 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.
- <u>Annual Equity Grant</u>: Annual equity grant of an option to purchase 10,500 ordinary shares (an increase from the current 9,000 ordinary shares), all of which shall vest on the earlier of the 2020 Annual General Meeting of Shareholders or the first anniversary of the date of grant.
- <u>Proration</u>: 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.

Directors who are employed by us are ineligible to receive compensation from us for services rendered in their capacity as directors.

We believe the authorization requested in this Proposal 3 will benefit our shareholders by enabling us to attract and retain qualified individuals to serve as members of our Board and to continue to provide leadership to the Company.

The affirmative vote of a majority of the votes cast by holders of ordinary shares voting in person or by proxy at the 2019 AGM is required to approve the non-employee directors' compensation (meaning the number of shares voted "for" the proposal must exceed the number of shares voted "against" the proposal).

# THE BOARD OF DIRECTORS RECOMMENDS A VOTE "<u>FOR</u>" THE APPROVAL OF THE NON-EMPLOYEE DIRECTORS' COMPENSATION AND PROXIES SOLICITED BY THE BOARD WILL BE VOTED IN FAVOR THEREOF UNLESS A SHAREHOLDER HAS INDICATED OTHERWISE ON THE PROXY CARD.

# **PROPOSAL 4: ORDINARY SHARE ALLOTMENTS AND ISSUANCES**

We are incorporated in the Republic of Singapore. Under the laws of Singapore, our directors may issue ordinary shares and make offers or agreements or grant options that might or would require the issuance of ordinary shares only with the prior approval of our shareholders. We are submitting this proposal to authorize our Board (or a committee thereof) to allot and issue our ordinary shares from time to time, as set forth below, because we are required to do so under the laws of Singapore before we can issue any ordinary shares in connection with our equity compensation plans, possible future strategic transactions, or public and private offerings.

If this proposal is approved, the authorization would be effective from the date of the 2019 AGM and continue until the earlier of (i) the conclusion of our 2020 Annual General Meeting of Shareholders or (ii) the expiration of the period within which our 2020 Annual General Meeting of Shareholders is required by the laws of Singapore to be held. Our 2020 Annual General Meeting of Shareholders is required to be held no later than 15 months after the date of the 2019 AGM or within six months from the financial year end, whichever is earlier. The laws of Singapore allow for an application to be made to the Singapore Accounting and Corporate Regulatory Authority to extend the deadline for holding an annual general meeting for an additional two months, which may be granted in the discretion of that authority.

Our Board believes that it is advisable and in the best interests of our shareholders for our shareholders to authorize the directors to issue ordinary shares and to make, enter into or grant offers, agreements or options that might or would require the issuance of ordinary shares. In the future, the directors may need to issue ordinary shares or make agreements that would require the allotment and issuance of new ordinary shares. For example, we may issue ordinary shares:

- in connection with strategic transactions and acquisitions;
- pursuant to public and private offerings of our ordinary shares, as well as instruments (including debt instruments) convertible into our ordinary shares; or
- in connection with our equity compensation plans and arrangements.

Notwithstanding this general authorization to allot and issue our ordinary shares, we will be required to seek shareholder approval with respect to future issuances of ordinary shares, where required under the Nasdaq Stock Market rules, such as if we were to propose an issuance of ordinary shares that would result in a change in control of the Company or in connection with certain transactions involving the issuance of ordinary shares representing 20% or more of our outstanding ordinary shares.

We expect that we will continue to issue ordinary shares and grant share options and other equity-based awards in the future under circumstances similar to those in the past. As of the date of this proxy statement, other than issuances of ordinary shares or agreements that would require the issuance of new ordinary shares in connection with our equity compensation plans and arrangements, including any equity compensation plans and awards we have assumed or may assume as a result of any acquisitions we may make, we have no specific plans, agreements or commitments to issue any ordinary shares for which approval of this proposal is required. Nevertheless, our Board believes that it is advisable and in the best interests of our shareholders for our shareholders to provide this general authorization in order to avoid the delay and expense of obtaining shareholder approval at a later date, and to provide us with greater flexibility to pursue strategic transactions and acquisitions and raise additional capital through public and private offerings of our ordinary shares, as well as instruments convertible into our ordinary shares.

If this proposal is approved, our directors would be authorized to allot and issue ordinary shares, during the period described above, subject to our Constitution, applicable Singapore laws and the Nasdaq Stock Market rules. The issuance of a large number of ordinary shares (or instruments convertible into ordinary shares) could

be dilutive to existing shareholders or reduce the trading price of our ordinary shares on the Nasdaq Global Market. If this proposal is not approved, we would not be permitted to issue ordinary shares (other than shares issuable on exercise or settlement of outstanding options and other instruments convertible into or exercisable for ordinary shares or the like, which were previously granted). If we are unable to rely upon equity as a component of compensation, we would have to review our compensation practices, and would likely have to substantially increase cash compensation to retain key personnel.

Accordingly, our Board seeks shareholder approval of Ordinary Resolution 4 as set out in the Notice. The affirmative vote of a majority of the votes cast by holders of ordinary shares voting in person or by proxy at the 2019 AGM is required to authorize the Board to allot and issue ordinary shares of the Company (meaning the number of shares voted "for" the proposal must exceed the number of shares voted "against" the proposal).

# THE BOARD OF DIRECTORS RECOMMENDS A VOTE "<u>FOR</u>" THE AUTHORIZATION OF ORDINARY SHARE ALLOTMENTS AND ISSUANCES AND PROXIES SOLICITED BY THE BOARD WILL BE VOTED IN FAVOR THEREOF UNLESS A SHAREHOLDER HAS INDICATED OTHERWISE ON THE PROXY CARD.

# **PROPOSAL 5: 2019 EMPLOYEE SHARE PURCHASE PLAN**

On June 4, 2019, our Board unanimously approved, subject to approval of our shareholders at the 2019 AGM, the adoption of the Wave Life Sciences Ltd. 2019 Employee Share Purchase Plan (the "ESPP"). The ESPP provides eligible employees with the opportunity to purchase our ordinary shares at a discount, on a tax-favored basis, through regular payroll deductions in compliance with Section 423 of the Internal Revenue Code of 1986, as amended (the "Code").

#### Summary of and Reasons for the Approval of the ESPP

The ESPP is being submitted to shareholders for approval at the 2019 AGM in order to ensure favorable federal income tax treatment under Section 423 of the Code for purchases of shares by our employees under the ESPP.

The ESPP allows all full-time and certain part-time employees to purchase our ordinary shares at a discount to fair market value. Eligible employees who elect to participate in the ESPP will purchase (i.e. subscribe for) new ordinary shares of the Company in January and July of each year using funds deducted from their paychecks during the preceding six months. The ESPP is expected to be an important component of the benefits package that we offer to our employees. We believe that the ESPP will aid us in retaining existing employees, recruiting and retaining new employees and aligning and increasing the interest of all employees in our success.

The Board believes it is in the best interest of the Company and our shareholders that the ESPP be approved. If approved, eligible employees who elect to participate in the ESPP will first be granted options to purchase ordinary shares under the ESPP on January 15, 2020.

#### Summary of the Material Features of the ESPP

The following is a general description of the material features of the ESPP. This summary is qualified in its entirety by reference to the text of the ESPP, a copy of which is attached as Appendix B to this proxy statement.

Administration. The ESPP will be administered under the direction of the Compensation Committee of the Board. The Compensation Committee has authority to interpret the ESPP and to make all other determinations necessary or advisable in administering it.

*Eligibility.* All full-time employees and certain part-time employees who have been continuously employed for at least three months prior to an offering date will be eligible to participate in the ESPP. For part-time employees to be eligible, they must have customary employment of more than five months in any calendar year and more than 20 hours per week. However, no employee shall be eligible to participate to the extent that, immediately after the grant, (i) that employee would own stock and/or options or securities to purchase stock possessing 5% or more of the combined voting power or the value of all classes of our stock, or (ii) his or her rights to purchase stock under all of our employee share purchase plans accrues at a rate that exceeds \$25,000 for each calendar year in which such rights are outstanding and exercisable.

As of June 10, 2019, approximately 243 employees would be eligible to participate in the ESPP if the ESPP was in effect. Participation in the ESPP is at the election of each eligible employee and the amounts received by a participant under the ESPP depend on the fair market value of our ordinary shares on future dates; therefore, the benefits or amounts that will be received by any participant if the ESPP is approved by our shareholders, are not currently determinable.

*Shares Available for Issuance*. Assuming the ESPP is approved by our shareholders at the 2019 AGM, there will be 1,000,000 ordinary shares available for issuance under the ESPP, subject to adjustment upon changes in the capitalization of the Company, as described further below.

*Participation.* To participate in the ESPP, an eligible employee authorizes payroll deductions in an amount not less than 1% nor greater than 15% of his or her "eligible earnings" (i.e., regular base pay, including overtime pay but not including bonuses, employee benefit plans or other additional payments) for each full payroll period in the offering period. A participant may purchase a maximum of 500 shares during each offering period, unless such amount is changed by the administrator. In addition, the maximum number of our ordinary shares that may be purchased by any participant during an offering period shall equal \$25,000 divided by the fair market value of our ordinary shares on the first day of an offering period. To ensure that IRS share limitations are not exceeded, we do not accept contributions from an individual participant in excess of \$21,250 per calendar year.

*Purchases.* Eligible employees enroll in a six-month offering period during the open enrollment period prior to the start of that offering period. A new offering period begins approximately every January 15<sup>th</sup> and July 15<sup>th</sup>. At the end of each offering period, the accumulated deductions, are used to purchase our shares. Shares are purchased at a price equal to 85% of the lower of the fair market value of our ordinary shares on the first business day or the last business day of an offering period. On June 10, 2019, the closing market price per share of our ordinary shares was \$24.43 as reported by the Nasdaq Stock Market.

*Withdrawal; Termination of Employment.* A participating employee may end his or her participation in the ESPP by delivering written notice to the administrator, which, to be effective must be delivered not later than five business days prior to an exercise date. Upon such withdrawal, the balance in the participant's account will be returned to the participant, without interest, as soon as administratively practicably thereafter. If a participating employee voluntarily resigns or is terminated by the Company prior to the last day of an offering period, the employee's option to purchase terminates and the amount in the employee's account is returned to the employee.

*Transferability.* Neither contributions credited to a participant's account nor any rights with regard to the exercise of an option or to receive shares under the ESPP may be assigned, transferred, pledged or otherwise disposed of in any way (other than by will or the laws of descent or distribution to a designated beneficiary upon the participant's death) by the participant.

Adjustments upon Change in Capitalization. Subject to any required action by the shareholders of the Company, the number of ordinary shares covered by unexercised options under the ESPP, the number of ordinary shares which have been authorized for issuance under the ESPP but are not yet subject to options, as well as the price per ordinary share covered by each unexercised option under the ESPP, shall be proportionately adjusted for any increase or decrease in the number of issued ordinary shares resulting from a share split, reverse share split, share dividend, combination or reclassification of our ordinary shares.

In the event of the proposed dissolution or liquidation of the Company, any offering period then in progress will terminate immediately prior to the consummation of such proposed action, unless otherwise provided by the Board. In the event of a proposed sale of all or substantially all of the assets of the Company, or merger, consolidation or other capital reorganization of the Company with or into another corporation, each option outstanding under the ESPP shall be assumed or an equivalent option shall be substituted by such successor corporation unless the Board determines, in its sole discretion and in lieu of assumption or substitution, to shorten an offering period then in progress.

*Participation Adjustment.* If the number of unsold shares that are available for purchase under the ESPP is insufficient to permit exercise of all rights deemed exercised by all participating employees, a participation adjustment will be made, and the number of shares purchasable by all participating employees is reduced proportionately. Any funds remaining in a participating employee's account after such exercise are refunded to the employee, without interest.

*Amendment.* The Board may amend the ESPP at any time and in any respect unless shareholder approval of the amendment in question is required under Section 423 of the Code, any national securities exchange or system on which our ordinary shares are then listed or reported, or under any other applicable laws, rules, or regulations.

*Termination.* The Board may terminate the ESPP at any time and for any reason or for no reason, provided that no termination shall impair any rights of participating employees that have vested at the time of termination. Without further action of the Board, the ESPP shall terminate at such time as all ordinary shares that may be made available for purchase under the ESPP have been issued.

#### **U.S. Federal Income Tax Consequences**

The following summary is intended only as a general guide to the material U.S. federal income tax consequences of participation in the ESPP. The summary is based on existing U.S. laws and regulations, and there can be no assurance that those laws and regulations will not change in the future. The summary does not purport to be complete and does not discuss the tax consequences upon a participant's death, nor the provisions of the income tax laws of any municipality, state or foreign country in which the participant may reside. As a result, tax consequences for any participant may vary based on individual circumstances.

The ESPP, and the rights of participant employees to make purchases thereunder, qualify for treatment under the provisions of Sections 421 and 423 of the Code. Under these provisions, no income will be taxable to a participant until the shares purchased under the ESPP are sold or otherwise disposed of.

Upon sale or other disposition of the shares, the participant will generally be subject to tax and the amount of the tax will depend upon the holding period. If the shares are sold or otherwise disposed of more than two years from the first day of the relevant offering period (and more than one year from the date the shares are purchased), then the participant generally will recognize ordinary income measured as the lesser of:

- (i) the excess of the fair market value of the ordinary shares at the time of such sale or disposition over the purchase price of such shares, or
- (ii) an amount equal to 15% of the fair market value of the shares as of the first day of the applicable offering period.

Any additional gain should be treated as long-term capital gain. If the shares are held for at least the holding periods described above but are sold for a price that is less than the purchase price, there will be no ordinary income and the difference will be a long-term capital loss. We will not be entitled to an income tax deduction with respect to the grant or exercise of a right to purchase our shares, or the sale of such shares by a participant, where such participant holds such shares for at least the holding periods described above.

Any sale or other disposition of shares before the expiration of the holding periods described above will be a "disqualifying disposition," and the participant will recognize ordinary income at the time of such disposition generally measured as the excess of the fair market value of the shares on the date the shares are purchased over the purchase price, and we will be entitled to an income tax deduction for such ordinary income. Any additional gain or loss on such sale or disposition will be long-term or short-term capital gain or loss, depending on the holding period following the date the shares were purchased by the participant prior to such sale or disposition, and we will not be entitled to an income tax deduction for any such capital gain.

#### **Vote Required**

The affirmative vote of a majority of the votes cast by holders of ordinary shares voting in person or by proxy at the 2019 AGM is required to approve the 2019 Employee Share Purchase Plan (meaning the number of shares voted "for" the proposal must exceed the number of shares voted "against" the proposal).

THE BOARD OF DIRECTORS RECOMMENDS A VOTE "<u>FOR</u>" THE APPROVAL OF THE 2019 EMPLOYEE SHARE PURCHASE PLAN AND PROXIES SOLICITED BY THE BOARD WILL BE VOTED IN FAVOR THEREOF UNLESS A SHAREHOLDER HAS INDICATED OTHERWISE ON THE PROXY CARD.

# PROPOSAL 6: NON-BINDING ADVISORY RESOLUTION ON APPROVAL OF EXECUTIVE COMPENSATION AS DISCLOSED IN THIS PROXY STATEMENT

We are seeking your advisory vote (on a non-binding, advisory basis only) as required by Section 14A of the Exchange Act on the approval of the compensation of our named executive officers as described in the Compensation Discussion and Analysis, the compensation tables and related material contained in this proxy statement. Because your vote is advisory, it will not be binding on our Compensation Committee or our Board. However, the Compensation Committee and our Board will review the voting results and take them into consideration when making future decisions regarding executive compensation. In accordance with Proposal 7 below, we expect that the next advisory vote to approve the compensation of our named executive officers will occur at our 2020 Annual General Meeting of Shareholders.

Our compensation philosophy is designed to align each executive's compensation with our short-term and long-term performance and to provide the compensation and incentives needed to attract, motivate and retain key executives who are crucial to our long-term success. Shareholders are urged to read the Compensation Discussion and Analysis section of this proxy statement, which discusses how our compensation policies and procedures implement our compensation philosophy. The Compensation Committee and our Board believe that these policies and procedures are effective in implementing our compensation philosophy and in achieving its goals. Therefore, we are asking our shareholders to indicate their support for our named executive officer compensation as described in this proxy statement. This proposal, commonly known as a "say on pay" proposal, gives our shareholders the opportunity to express their views on our named executive officers' compensation. This vote is not intended to address any specific item of compensation, but rather the overall compensation of our named executive officers and the philosophy, policies and practices described in this proxy statement.

In accordance with the rules of the SEC, the following proposal is being submitted for a non-binding, advisory shareholder vote at the 2019 AGM:

"RESOLVED, on a non-binding, advisory basis only, that the compensation paid to the named executive officers of the Company, as disclosed pursuant to the compensation disclosure rules of the Securities and Exchange Commission, including the Compensation Discussion and Analysis, the compensation tables and the related material disclosed in this proxy statement, is hereby APPROVED."

This non-binding advisory resolution is being proposed to shareholders as required pursuant to the requirements of Section 14A of the Exchange Act. The shareholders' vote on this proposal is solely advisory and non-binding in nature, will have no legal effect for purposes of Singapore law and will not be enforceable against our Company or our Board. For the avoidance of doubt, this is not an Ordinary Resolution.

The affirmative vote of a majority of the votes cast by holders of ordinary shares voting in person or by proxy at the 2019 AGM is required to approve, on a non-binding, advisory basis only, the compensation of our named executive officers, as described in this proxy statement (meaning the number of shares voted "for" the proposal must exceed the number of shares voted "against" the proposal). Although the advisory resolution is non-binding, the Compensation Committee and our Board will review the voting results and take them into consideration when making future decisions regarding executive compensation.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE "<u>FOR</u>" THE APPROVAL (ON A NON-BINDING, ADVISORY BASIS ONLY) OF THE COMPENSATION OF OUR NAMED EXECUTIVE OFFICERS AND PROXIES SOLICITED BY THE BOARD WILL BE VOTED IN FAVOR THEREOF UNLESS A SHAREHOLDER HAS INDICATED OTHERWISE ON THE PROXY CARD.

# PROPOSAL 7: NON-BINDING ADVISORY RESOLUTION ON APPROVAL OF THE FREQUENCY OF HOLDING AN ADVISORY VOTE ON THE COMPENSATION OF OUR NAMED EXECUTIVE OFFICERS

We are seeking your input (on a non-binding, advisory basis only) as required by Section 14A of the Exchange Act with regard to the frequency of holding future shareholder advisory votes on the compensation of our named executive officers. In particular, we are asking whether the advisory vote on the compensation of our named executive officers (Proposal 6) should occur every year, every two years or every three years. Because your vote is advisory, it will not be binding on our Compensation Committee or our Board. However, the Compensation Committee and our Board will review the voting results and take them into consideration when making future decisions regarding how frequently it should present the advisory vote on the compensation of our named executive officers to our shareholders.

Our Board believes that an annual executive compensation advisory vote will facilitate more direct shareholder input about executive compensation and is consistent with our policy of reviewing our compensation program annually and with us being accountable to our shareholders on corporate governance and executive compensation matters. We believe an annual vote (on a non-binding, advisory basis only) would be the best governance practice for Wave at this time.

Accordingly, the following proposal is being submitted for a non-binding, advisory shareholder vote at the 2019 AGM:

"RESOLVED, that the shareholders recommend that a non-binding, advisory vote to approve the compensation paid to the named executive officers of the Company be put to shareholders for their consideration with one of the following three frequencies:

- (a) every year;
- (b) every two years; or
- (c) every three years."

This non-binding advisory resolution is being proposed to shareholders as required pursuant to the requirements of Section 14A of the Exchange Act. The shareholders' vote on this proposal is solely advisory and non-binding in nature, will have no legal effect for purposes of Singapore law and will not be enforceable against our Company or our Board. For the avoidance of doubt, this is not an Ordinary Resolution. The proxy card provides shareholders with the opportunity to choose among three options (holding the vote every one, two or three years, or in the alternative, shareholders may abstain from casting a vote at all) and, therefore, shareholders will not be voting to approve or disapprove our Board's recommendation. The shareholders' vote on this proposal will not be binding on our Compensation Committee or our Board, but the frequency which carries the highest total number of affirmative votes will be considered to be the frequency approved, on a non-binding, advisory basis only, by our shareholders.

# THE BOARD OF DIRECTORS RECOMMENDS A VOTE TO APPROVE (ON A NON-BINDING, ADVISORY BASIS ONLY) THE FREQUENCY OF HOLDING A VOTE ON THE COMPENSATION OF OUR NAMED EXECUTIVE OFFICERS EVERY YEAR AND PROXIES SOLICITED BY THE BOARD WILL BE VOTED IN FAVOR OF SUCH FREQUENCY UNLESS A SHAREHOLDER HAS INDICATED OTHERWISE ON THE PROXY CARD.

# 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.

# **OTHER MATTERS**

The Board of Directors knows of no other business which will be presented at the 2019 AGM. If any other business is properly brought before the 2019 AGM, proxies will be voted in accordance with the judgment of the persons named therein.

# SHAREHOLDER PROPOSALS AND NOMINATIONS FOR DIRECTOR

To be considered for inclusion in the proxy statement relating to our 2020 Annual General Meeting of Shareholders, we must receive shareholder proposals (other than for director nominations) no later than February 29, 2020. To be considered for presentation at our 2020 Annual General Meeting of Shareholders, although not included in the proxy statement, proposals (including director nominations that are not requested to be included in our proxy statement) must be received no later than May 14, 2020. Shareholder proposals are also subject to the requirements of the Singapore Companies Act as described in the paragraph below. Proposals that are not received in a timely manner will not be voted on at our 2020 Annual General Meeting of Shareholders. If a proposal is received on time, the proxies that management solicits for the meeting may still exercise discretionary voting authority on the proposal under circumstances consistent with the proxy rules of the SEC. All shareholder proposals should be marked for the attention of General Counsel, Wave Life Sciences Ltd., 733 Concord Avenue, Cambridge, MA 02138.

In addition, under Section 183 of the Singapore Companies Act, only registered shareholders representing not less than 5% of the total voting rights or registered shareholders representing not fewer than 100 registered shareholders having an average paid up sum of at least S\$500 (Singapore dollars) each may, at their expense, request that we include and give notice of their proposal for our 2020 Annual General Meeting of Shareholders. Subject to satisfaction of the requirements of Section 183 of the Singapore Companies Act, any such requisition must be signed by all the shareholders making the request and be deposited at our registered office in Singapore, 7 Straits View #12-00, Marina One East Tower, Singapore 018936, at least six weeks prior to the date of our 2020 Annual General Meeting of Shareholders in the case of a request requiring notice of a resolution, or at least one week prior to the date of our 2020 Annual General Meeting of Shareholders in the case of any other request.

Cambridge, Massachusetts June 26, 2019

# Wave Life Sciences Ltd. and its Subsidiaries

Registration Number: 201218209G

Singapore Statutory Financial Statements Year ended December 31, 2018

Wave Life Sciences Ltd. and its Subsidiaries Singapore Statutory Financial Statements Year ended December 31, 2018

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#### **Directors' Statements**

The directors are pleased to submit this annual report to the members of Wave Life Sciences Ltd. ("the Parent"), together with these directors' statements, the audited financial statements for the financial year ended December 31, 2018 and the auditors' report thereon.

In our opinion:

- a) other than as discussed in the Investment in Subsidiaries paragraph in Note 2 to the supplementary financial information, the consolidated financial statements of Wave Life Sciences Ltd. and its subsidiaries (together "the Company") and the supplementary financial information of the Parent set out on pages F-1 to F-48 are drawn up so as to give a true and fair view of the financial position of the Company and of the Parent as at December 31, 2018, the financial performance, changes in equity and cash flows of the Company for the year ended on that date in accordance with the provisions of the Singapore Companies Act, Chapter 50 and accounting principles generally accepted in the United States of America; and
- b) at the date of this statement, there are reasonable grounds to believe that Wave Life Sciences Ltd. will be able to pay its debts as and when they fall due.

The board of directors has, on the date of this statement, authorized these financial statements for issue.

#### Directors

The directors in office at the date of this statement are as follows:

Paul B. Bolno Chief Executive Officer Christian O. Henry Peter Kolchinsky Koji Miura Adrian Rawcliffe Ken Takanashi Gregory L. Verdine

# **Directors' Interests**

According to the register kept by Wave Life Sciences Ltd. for the purposes of Section 164 of the Companies Act, Chapter 50 ("the Act") and the Wave Life Sciences Ltd. option ledger, particulars of interests of directors who held office at the end of the financial year (including those held by their spouses and infant children) in shares, debentures, warrants and share options of Wave Life Sciences Ltd. or in related corporations (other than wholly-owned subsidiaries) are as follows:

Name of director and corporation in which interests are held	Holdings as of January 1, 2018	Holdings as of December 31, 2018
Paul B. Bolno		
Wave Life Sciences Ltd.		
- Ordinary shares	190,856	197,217
- Options to purchase ordinary shares at:		
- US\$2.48 between March 10, 2015 and March 10, 2025	544,025	494,025
- US\$18.79 between June 16, 2016 and June 16, 2026	236,400	236,400
- US\$29.05 between January 25, 2017 and January 25, 2027	72,500	72,500
- US\$40.05 between January 23, 2018 and January 23, 2028		109,000
- Restricted share units	36,300	81,725
Christian O. Henry		
Wave Life Sciences Ltd.		
- Options to purchase ordinary shares at:		
- US\$36.43 between November 10, 2016 and November 10, 2021	18,000	18,00
- US\$18.10 between August 10, 2017 and August 10, 2022	9,000	9,00
- US\$46.70 between August 13, 2018 and August 13, 2023	—	9,00
Peter Kolchinsky		
Wave Life Sciences Ltd.		
- Options to purchase ordinary shares at:		
- US\$36.43 between November 10, 2016 and November 10, 2021	9,000	9,00
- US\$18.10 between August 10, 2017 and August 10, 2022	9,000	9,00
- US\$46.70 between August 13, 2018 and August 13, 2023	—	9,00
Koji Miura		
Wave Life Sciences Ltd.		
- Options to purchase ordinary shares at:		
- US\$36.43 between November 10, 2016 and November 10, 2021	9,000	9,00
- US\$18.10 between August 10, 2017 and August 10, 2022	9,000	9,00
- US\$46.70 between August 13, 2018 and August 13, 2023		9,00
Adrian Rawcliffe		
Wave Life Sciences Ltd.		
- Options to purchase ordinary shares at:		
- US\$28.80 between February 1, 2017 and February 1, 2022	18,000	18,00
- US\$18.10 between August 10, 2017 and August 10, 2022	9,000	9,00
- US\$46.70 between August 13, 2018 and August 13, 2023		9,000

#### Wave Life Sciences Ltd. and its Subsidiaries Directors' Statements Year ended December 31, 2018

Name of director and corporation in which interests are held	Holdings as of January 1, 2018	Holdings as of December 31, 2018
Ken Takanashi		
Wave Life Sciences Ltd.		
- Options to purchase ordinary shares at:		
- US\$36.43 between November 10, 2016 and November 10, 2021	9,000	9,000
- US\$18.10 between August 10, 2017 and August 10, 2022	9,000	9,000
- US\$46.70 between August 13, 2018 and August 13, 2023	—	9,000
Gregory L. Verdine		
Wave Life Sciences Ltd.		
- Ordinary shares	75,039	60,039
- Options to purchase ordinary shares at:		
- US\$2.48 between March 10, 2015 and March 10, 2025	532,803	532,803
- US\$36.43 between November 10, 2016 and November 10, 2021	9,000	9,000
- US\$18.10 between August 10, 2017 and August 10, 2022	9,000	9,000
- US\$46.70 between August 13, 2018 and August 13, 2023	—	9,000

Except as disclosed in this statement, no director who held office at the end of the financial year had interests in shares, debentures, warrants or share options of Wave Life Sciences Ltd., or of its related corporations, either at the beginning of the financial year, or date of his/her appointment to this board of directors, if later.

Except as disclosed in Note 7 to the consolidated financial statements, there were no unissued shares of Wave Life Sciences Ltd. or its subsidiaries under options granted by Wave Life Sciences Ltd. or its subsidiaries as of the end of the financial year.

# Auditors

KPMG LLP were re-appointed as auditors of Wave Life Sciences Ltd. on August 7, 2018. The auditors, KPMG LLP, have indicated their willingness to accept re-appointment.

On behalf of the board of directors,

/s/ Christian O. Henry Christian O. Henry

Director

/s/ Paul B. Bolno, M.D. Paul B. Bolno, M.D.

Director



KPMG LLP 16 Raffles Quay #22-00 Hong Leong Building Singapore 048581

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#### Independent auditors' report

Members of the Company Wave Life Sciences Ltd. and its subsidiaries

#### Report on the audit of the financial statements

#### Qualified opinion

We have audited the accompanying consolidated financial statements of Wave Life Sciences Ltd. and its subsidiaries (the "Company") and the supplementary financial information of Wave Life Sciences Ltd. (the "Parent"), which comprise the balance sheets of the Company and Parent as at December 31, 2018, consolidated statements of operations and comprehensive loss, consolidated statements of series A preferred shares and shareholders' equity, and consolidated statements of cash flows of the Company for the year then ended, and notes to the financial statements, including a summary of significant accounting policies, as set out on pages F-1 to F-48 (collectively, the "financial statements").

In our opinion, except for the effects of the matter described in the "*Basis for qualified opinion*" section of our report, the consolidated financial statements of the Company and the balance sheet of the Parent are properly drawn up in accordance with the provisions of the Companies Act, Chapter 50 (the "Act") and accounting principles generally accepted in the United States of America (the use of which is approved by the Accounting and Corporate Regulatory Authority of Singapore) so as to give a true and fair view of the financial position of the Company and of the Parent as at December 31, 2018 and of the financial performance, changes in equity and cash flows of the Company for the year ended on that date.

#### Basis for qualified opinion

Accounting principles generally accepted in the United States of America require that the investments in subsidiaries be consolidated. For the purposes of the supplementary financial information provided as a part of the Singapore Statutory Financial Statements, the Parent did not consolidate the investments in subsidiaries and reported these investments and the balances with subsidiaries as separate lines in the Parent's standalone balance sheet. The Parent's investments in subsidiaries are accounted for by either increasing its initial investment in each subsidiary by that subsidiary's net loss for each financial year or by decreasing its initial investment in each subsidiary's net loss for each financial year to the extent of the initial investment of the subsidiary. Our audit opinion on the financial statements for the year ended December 31, 2017 dated June 27, 2018 also included a modification on the same matter.

We conducted our audit in accordance with Singapore Standards on Auditing ("SSAs"). Our responsibilities under those standards are further described in the "Auditors' responsibilities for the audit of the financial statements" section of our report. We are independent of the Company in accordance with the Accounting and Corporate Regulatory Authority Code of Professional Conduct and Ethics for Public Accountants and Accounting Entities ("ACRA Code") together with the ethical requirements that are relevant to our audit of the financial statements in Singapore, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the ACRA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our qualified opinion.



Wave Life Sciences Ltd. and its Subsidiaries Independent Auditors' Report Year ended December 31, 2018

# Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. In addition to the matter described in the "*Basis for qualified opinion*" section, we have determined the matter described below to be the key audit matter to be communicated in our report.

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Revenue recognition under the Pfizer collaboration agreement

Refer to Note 5 Collaboration Agreements and the accounting policy note on revenue recognition in the consolidated financial statements

# The key audit matter

In May 2016, the Group entered into a Research, License and Option Agreement (the "Pfizer Collaboration Agreement") with Pfizer Inc. ("Pfizer"). Under the agreement, the Group and Pfizer agreed to collaborate on up to five Pfizer programs over a four year research term, the target nomination period for Pfizer to identify the five Pfizer programs ("targets") was eighteen months ended November 5, 2017 and Pfizer had declared two of the five targets upon initiation of the agreement. Subsequently, the target nomination period was extended to May 5, 2018. During 2018, Pfizer nominated the fourth and fifth targets in March 2018 and April 2018 respectively. As of December 31, 2018, all five targets have been nominated by Pfizer (where nomination of the third target was completed in August 2016).

In May 2016, Pfizer paid the Group an upfront license fee payment amounting to \$10.0 million. In the same month, the Company closed the Pfizer Equity Agreement and received cash proceeds of \$30.0 million. The Company did not incur any material costs in connection with the issuance of shares.

Management identified five distinct performance obligations in the Pfizer Collaboration Agreement in accordance with ASC 606 *Revenue from Contracts with Customers*.

Revenue of \$4.9 million (December 31, 2017: \$3.9 million; December 31, 2016: \$1.1 million) has been recognized as of December 31, 2018. The amounts

# How the matter was addressed in our audit

Our audit procedures include:

- Assessing whether the revenue recognized for Pfizer Collaboration Agreement is in accordance with our understanding of the transactions and the requirements of ASC 606 *Revenue from Contracts with Customers*, which involves (i) identification of performance obligations; (ii) determination of allocation consideration; and, (iii) period of recognition.
- Understanding and assessing management's process of setting and developing the estimated period over which the research and development services are fulfilled, including management's process to adjust the estimates for changes during the research and development period.
- Performing management enquiries and corroborating, and reading project minutes to identify program changes impacting the timeline.
- Independently re-computing the revenue to be recognized and deferred as at and for the year ended December 31, 2018.

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Wave Life Sciences Ltd. and its Subsidiaries Independent Auditors' Report Year ended December 31, 2018

received prior to satisfaction of revenue criteria of \$8.7 million have been recorded as deferred revenue as of December 31, 2018.

There is significant judgment in assessing the deliverables of the arrangement with Pfizer; (i) whether these deliverables are separate performance obligations; (ii) determination of the transaction value to be allocated for each performance obligation; and, (iii) the period over which revenue is recognized. These are key focus areas of our audit.

## Findings:

We found the assessment of the deliverables in the arrangement, the allocation of the transaction value to each performance obligation, and the revenue recognition period to be reasonable.

Revenue recognition under the Takeda collaboration agreement

Refer to Note 5 Collaboration Agreements and the accounting policy note on revenue recognition in the consolidated financial statements

## The key audit matter

In February 2018, the Group's subsidiaries namely, Wave Life Sciences USA, Inc. ("Wave USA") and Wave Life Sciences UK Limited ("Wave UK") entered into a global strategic collaboration (the "Takeda Collaboration") with Takeda Pharmaceutical Group Limited ("Takeda"). Under the agreement, Wave USA, Wave UK and Takeda agreed to collaborate on the research, development and commercialization of oligonucleotide therapeutics for disorders of the Central Nervous System ("CNS"). The Takeda Collaboration provides the Group with at least \$230.0 million in committed cash and the option for Takeda to co-develop and co-commercialize the Group's CNS development programs in (1) Huntington's Disease ("HD"); (2) Amyotrophic Lateral Sclerosis ("ALS") and Frontotemporal Dementia ("FTD"); and (3) the Group's discovery-stage program targeting ATXN3 for the treatment of spinocerebellar ataxia 3 ("SCA3") (collectively, "Category 1 Programs"). In addition, Takeda will have the right to exclusively license multiple preclinical programs for CNS disorders, including Alzheimer's disease and Parkinson's disease (collectively, "Category 2 Programs").

#### How the matter was addressed in our audit

Our audit procedures include:

 Assessing whether the revenue recognized for Pfizer Collaboration Agreement is in accordance with our understanding of the transactions and the requirements of ASC 606 *Revenue from Contracts with Customers*, which involves (i) identification of performance obligations; (ii) determination of allocation consideration; and, (iii) period of recognition.

In assessing the critical accounting estimates associated with allocation consideration to those performance obligations, reviewed the relevant third party studies that form some of the inputs to management models and engaged KPMG specialist to review third party discount rates used by management.

 Understanding and assessing management's process of setting and developing the estimated period over which the research and development services are fulfilled, including management's process to adjust the estimates for changes during the research and development period.

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Simultaneously with Wave USA's and Wave UK's entry into the Takeda Collaboration, the Company entered into Share Purchase Agreement (the "Takeda Equity Agreement"), and together with the Takeda Collaboration, pursuant to which it agreed to sell to Takeda 1,096,892 ordinary shares at a purchase price of \$54.70 per ordinary share.

In April 2018, Takeda paid the Group an upfront amount of \$110.0 million. Takeda also agreed to fund \$60.0 million during the four-year research term of the Group's research and preclinical activities and reimburse for any collaboration-budgeted research and preclinical expenses incurred by the Group which exceed that amount. In the same month, the Company closed the Takeda Equity Agreement and received cash proceeds of \$60.0 million. The Company did not incur any material costs in connection with the issuance of shares.

Management identified seven distinct performance obligations in the Takeda Collaboration in accordance with ASC 606 *Revenue from Contracts with Customers*.

Revenue of \$9.6 million has been recognized as of December 31, 2018. The amounts received prior to satisfaction of revenue criteria of \$160.4 million have been recorded as deferred revenue as of December 31, 2018.

There is significant judgment in assessing the deliverables of the arrangement with Takeda; (i) whether these deliverables are separate performance obligations; (ii) determination of the transaction value to be allocated for each performance obligation; and, (iii) the period over which revenue is recognized. In addition, there is judgment involved in determining the fair value of the ordinary shares issued to Takeda under the Takeda Equity Agreement. These are key focus areas of our audit.

## Findings:

#### Wave Life Sciences Ltd. and its Subsidiaries Independent Auditors' Report Year ended December 31, 2018

- Performing management enquiries and corroborating and reading project minutes to identify program changes impacting the timeline.
- Independently re-computing the revenue and deferred revenue amounts as at and for the year ended December 31, 2018.
- Validating the fair value used for the purchase of the Company's ordinary shares and that the agreement does not include share adjustment features beyond the standard anti-dilution.

We found the equity transaction and the assessment of the deliverables in the arrangement, the allocation of the transaction value to each performance obligation, and the revenue recognition period to be reasonable.





The above key audit matter applies to both the consolidated financial statements and the supplementary balance sheet.

### Other information

Management is responsible for the other information contained in the Singapore Statutory Financial Statements. Other information is defined as all information in the Singapore Statutory Financial Statements other than the financial statements and our auditors' report thereon. We have obtained all other information prior to the date of this auditors' report.

Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

## Responsibilities of management and directors for the financial statements

Management is responsible for the preparation of financial statements that give a true and fair view in accordance with the provisions of the Act and accounting principles generally accepted in the United States of America, and for devising and maintaining a system of internal accounting controls sufficient to provide a reasonable assurance that assets are safeguarded against loss from unauthorised use or disposition; and transactions are properly authorised and that they are recorded as necessary to permit the preparation of true and fair financial statements and to maintain accountability of assets.

In preparing the financial statements, management is responsible for evaluating whether there are conditions and events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern within one year after the date the financial statements are issued.

The directors' responsibilities include overseeing the Company's financial reporting process.

## Auditors' responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with SSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

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#### Wave Life Sciences Ltd. and its Subsidiaries Independent Auditors' Report Year ended December 31, 2018

As part of an audit in accordance with SSAs, we exercise professional judgement and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit
  procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk
  of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion,
  forgery, intentional omissions, misrepresentations, or the override of internal controls.
- Obtain an understanding of internal controls relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal controls.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Company to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the company audit. We remain solely responsible for our audit opinion.

We communicate with the directors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal controls that we identify during our audit.

We also provide the directors with a statement that we have complied with relevant ethical requirements regarding independence, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the directors, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditors' report unless the law or regulations preclude public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

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Wave Life Sciences Ltd. and its Subsidiaries Independent Auditors' Report Year ended December 31, 2018

## Report on other legal and regulatory requirements

In our opinion, the accounting and other records required by the Act to be kept by the Parent have been properly kept in accordance with the provisions of the Act.

The engagement partner on the audit resulting in this independent auditors' report is Malcolm Ramsay.

/s/ KPMG

**KPMG LLP** *Public Accountants and Chartered Accountants* 

Singapore June 26, 2019

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# WAVE LIFE SCIENCES LTD. CONSOLIDATED BALANCE SHEETS

(In thousands, except share amounts)

	December 31, 2018	December 31, 2017
Assets		
Current assets:		
Cash and cash equivalents	\$ 174,819	\$ 142,503
Current portion of accounts receivable	10,000	1,000
Prepaid expenses and other current assets	17,454	6,985
Total current assets	202,273	150,488
Long-term assets:		
Accounts receivable, net of current portion	50,000	—
Property and equipment, net	39,931	27,334
Restricted cash	3,625	3,610
Other assets	111	411
Total long-term assets	93,667	31,355
Total assets	\$ 295,940	\$ 181,843
Liabilities, Series A preferred shares and shareholders' equity		
Current liabilities:		
Accounts payable	\$ 13,089	\$ 7,598
Accrued expenses and other current liabilities	14,736	8,898
Current portion of capital lease obligation	—	16
Current portion of deferred rent	115	60
Current portion of deferred revenue	100,945	1,275
Current portion of lease incentive obligation	1,156	344
Total current liabilities	130,041	18,191
Long-term liabilities:		
Deferred rent, net of current portion	5,132	4,214
Deferred revenue, net of current portion	68,156	7,241
Lease incentive obligation, net of current portion	9,247	3,094
Other liabilities	2,142	1,619
Total long-term liabilities	84,677	16,168
Total liabilities	\$ 214,718	\$ 34,359
Series A preferred shares, no par value; 3,901,348 shares issued and outstanding at December 31, 2018 and 2017	\$ 7,874	\$ 7,874
Shareholders' equity:		
Ordinary shares, no par value; 29,472,197 and 27,829,079 shares issued and outstanding at December 31, 2018 and 2017, respectively	375,148	310,038
Additional paid-in capital	37,768	22,172
Accumulated other comprehensive income (loss)	153	116
Accumulated deficit	(339,721)	(192,716)
Total shareholders' equity	73,348	139,610
Total liabilities, Series A preferred shares and shareholders' equity	\$ 295,940	\$ 181,843
Total naomues, series is pretened shares and shareholders equity	\$ 233,340	φ 101,045

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

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

(In thousands, except share and per share amounts)

	For the Year Ended December 31,		
	2018	2017	2016
Revenue	\$ 14,414	\$ 3,893	\$ 1,092
Operating expenses:			
Research and development	134,428	79,309	40,818
General and administrative	39,509	26,975	15,994
Total operating expenses	173,937	106,284	56,812
Loss from operations	(159,523)	(102,391)	(55,720)
Other income (expense), net:			
Dividend income	3,368	1,578	255
Interest income (expense), net	22	6	337
Other income (expense), net	9,549	(331)	(50)
Other income (expense), net	12,939	1,253	542
Loss before income taxes	(146,584)	(101,138)	(55,178)
Income tax benefit (provision)	(69)	(842)	(482)
Net loss	\$ (146,653)	\$ (101,980)	\$ (55,660)
Net loss per share attributable to ordinary shareholders—basic and diluted	\$ (5.06)	\$ (3.85)	\$ (2.44)
Weighted-average ordinary shares used in computing net loss per share attributable to ordinary shareholders—basic and diluted	28,970,404	26,513,382	22,800,628
Other comprehensive income (loss):			
Net loss	\$ (146,653)	\$ (101,980)	\$ (55,660)
Foreign currency translation	37	407	(332)
Comprehensive loss	(146,616)	(101,573)	(55,992)

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

# WAVE LIFE SCIENCES LTD. CONSOLIDATED STATEMENTS OF SERIES A PREFERRED SHARES AND SHAREHOLDERS' EQUITY

(In thousands, except share amounts)

	Series Preferred		Ordinary	Shares	Additiona Paid-In-	al	Accumulated Other omprehensive	Accumulated	Sh	Total areholders'
	Shares	Amount	Shares	Amount	Capital		icome (Loss)	Deficit	-	Equity
Balance as of December 31, 2015	3,901,348	7,874	21,551,423	\$185,344	\$ 3,18	2 \$	41	\$ (35,076)	\$	153,491
Issuance of ordinary shares		—	1,875,000	30,000			—	—		30,000
Share-based compensation	—	—	—	—	6,84	7	—	—		6,847
Option exercises		—	75,746	258			—	—		258
Other comprehensive income (loss)	—	—	—	—			(332)	—		(332)
Net loss			—	_			—	(55,660)		(55,660)
Balance at December 31, 2016	3,901,348	\$ 7,874	23,502,169	\$215,602	\$ 10,02	9 \$	(291)	\$ (90,736)	\$	134,604
Issuance of ordinary shares, net of issuance costs										
of \$491			4,166,667	93,509			—	—		93,509
Share-based compensation		_	—	—	12,14	3	—	—		12,143
Vesting of RSUs			22,750	—			—	—		
Option exercises		_	137,493	927			—	—		927
Other comprehensive income (loss)				—			407	—		407
Net loss	—	—	—	—			—	(101,980)		(101,980)
Balance at December 31, 2017	3,901,348	\$ 7,874	27,829,079	\$310,038	\$ 22,17	2 \$	116	\$ (192,716)	\$	139,610
Issuance of ordinary shares	_		1,096,892	60,000			_			60,000
Share-based compensation				—	15,59	6	—	—		15,596
Vesting of RSUs	—	—	38,594	—			—	—		—
Option exercises			507,632	5,110			—	—		5,110
Impact of adoption of ASU 2016-16		_	—	—			—	(352)		(352)
Other comprehensive income (loss)				—			37	—		37
Net loss	_		—	—			—	(146,653)		(146,653)
Balance at December 31, 2018	3,901,348	\$ 7,874	29,472,197	\$375,148	\$ 37,76	8 \$	153	\$ (339,721)	\$	73,348

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

# WAVE LIFE SCIENCES LTD. CONSOLIDATED STATEMENTS OF CASH FLOWS

(In thousands)

	For the Year Ended December 31, 2018 2017 201		
Cash flows from operating activities			
Net loss	\$(146,653)	\$(101,980)	\$ (55,660)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:			
Amortization of lease incentive obligation	(790)	(208)	—
Depreciation of property and equipment	5,581	2,155	784
Share-based compensation expense	15,596	12,143	6,847
Net (gain) loss on disposal of property and equipment	44	205	
Deferred rent	973	3,594	565
Deferred income taxes	—	908	(698)
Tax benefit related to share-based compensation			(310)
Changes in operating assets and liabilities:			
Accounts receivable	(59,000)	(1,000)	_
Prepaid expenses and other current assets	(10,469)	(5,502)	(1,337)
Other assets	(52)	(358)	(53)
Accounts payable	4,936	3,892	3,369
Accrued expenses and other current liabilities	5,864	4,550	2,296
Deferred revenue	160,585	(2,893)	11,408
Other non-current liabilities	523	823	864
Net cash used in operating activities	(22,862)	(83,671)	(31,925)
Cash flows from investing activities			
Proceeds from the sale of property and equipment	—	—	4
Purchases of property and equipment, net of tenant improvement allowances	(9,938)	(18,887)	(5,567)
Net cash used in investing activities	(9,938)	(18,887)	(5,563)
Cash flows from financing activities			
Costs associated with initial public offering			(1,075)
Proceeds from issuance of ordinary shares, net of offering costs	60,000	93,509	30,000
Payments on capital lease obligation	(16)	(62)	(62)
Proceeds from the exercise of share options	5,110	927	258
Net cash provided by financing activities	65,094	94,374	29,121
Effect of foreign exchange rates on cash	37	403	(14)
Net increase (decrease) in cash, cash equivalents and restricted cash	32,331	(7,781)	(8,381)
Cash, cash equivalents and restricted cash, beginning of period	146,113	153,894	162,275
Cash, cash equivalents and restricted cash, end of period	\$ 178,444	\$ 146,113	\$153,894

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

## Wave Life Sciences Ltd.

## Notes to Consolidated Financial Statements

## **1. THE COMPANY**

#### Organization

Wave Life Sciences Ltd. (together with its subsidiaries, "Wave" or the "Company") is a clinical-stage genetic medicines company committed to delivering life-changing treatments for people battling devastating diseases. Using PRISM, Wave's proprietary discovery and drug development platform, enables Wave to target genetically defined diseases with stereopure oligonucleotides across multiple therapeutic modalities.

The Company was incorporated in Singapore on July 23, 2012 and has its principal U.S. office in Cambridge, Massachusetts. The Company was incorporated with the purpose of combining two commonly held companies, Wave Life Sciences USA, Inc. ("Wave USA"), a Delaware corporation (formerly Ontorii, Inc.), and Wave Life Sciences Japan, Inc. ("Wave Japan"), a company organized under the laws of Japan (formerly Chiralgen., Ltd.), which occurred on September 13, 2012. On May 31, 2016, Wave Life Sciences Ireland Limited ("Wave Ireland") was formed as a wholly-owned subsidiary of Wave Life Sciences Ltd. On April 3, 2017, Wave Life Sciences UK Limited ("Wave UK") was formed as a wholly-owned subsidiary of Wave Life Sciences Ltd.

The Company's primary activities since inception have been developing PRISM to design, develop and commercialize oligonucleotide therapeutics, advancing the Company's neurology business, building the Company's research and development activities in ophthalmology and hepatic, advancing programs into the clinic, furthering clinical development of such clinical-stage programs, building the Company's intellectual property, and assuring adequate capital to support these activities.

## **Risks and Uncertainties**

The Company is subject to risks common to companies in the biotechnology industry including, but not limited to, new technological innovations, protection of proprietary technology, developing internal manufacturing capabilities, dependence on key personnel, compliance with government regulations and the need to obtain additional financing. The Company's therapeutic programs will require significant additional research and development efforts, including extensive preclinical and clinical testing and regulatory approval, prior to commercialization of any product candidates. These efforts require significant amounts of additional capital, adequate personnel infrastructure and extensive compliance-reporting capabilities. There can be no assurance that the Company's research and development efforts will be successful, that adequate protection for the Company's intellectual property will be obtained, that any products developed will obtain necessary government regulatory approval or that any approved products will be commercially viable. Even if the Company's product development efforts are successful, it is uncertain when, if ever, the Company will generate significant revenue from product sales. The Company operates in an environment of rapid change in technology and substantial competition from pharmaceutical and biotechnology companies.

#### **Basis of Presentation**

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

## 2. SIGNIFICANT ACCOUNTING POLICIES

#### Cash Equivalents

The Company considers all highly liquid securities with original final maturities of three months or less from the date of purchase to be cash equivalents. Cash equivalents are comprised of funds in money market accounts.

## **Principles of Consolidation**

The Company's consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All intercompany balances and transactions have been eliminated in consolidation.

## Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of expenses during the reporting periods. Significant estimates and assumptions reflected in these consolidated financial statements include the valuation of the Company's ordinary shares prior to the initial public offering in November 2015, the assumptions used to determine the fair value of share-based awards, the Company's revenue recognition policy, particularly, (a) assessing the number of performance obligations; (b) determining the transaction price; (c) allocating the transaction price to the performance obligations in the contract; and (d) determining the pattern over which performance obligations are satisfied, including estimates to complete performance obligations, the evaluation of progress to completion of external research and development costs which can result in prepaid or accrued expenses related to the Company's deferred tax assets and determining uncertain tax positions and the related liabilities. Estimates are periodically reviewed in light of changes in circumstances, facts and experience. Actual results could differ from the Company's estimates.

## Segment Data

The Company manages its operations as a single segment for the purposes of assessing performance and making operating decisions. The Company's singular focus is on developing its proprietary discovery and drug development platform, PRISM, to develop and commercialize a broad pipeline of nucleic acid-based therapeutics, or oligonucleotides.

#### Foreign Currency Translation

The functional currency is the U.S. dollar for all of the Company's entities aside from Wave Japan, which has the Japanese Yen as its functional currency. Assets and liabilities of Wave Japan are translated at period end exchange rates while revenues and expenses are translated at average exchange rates for the period. Net unrealized gains and losses from foreign currency translation are reflected as other comprehensive income (loss) within the consolidated statements of Series A preferred shares and shareholders' equity and the consolidated statements of operations and comprehensive loss. Gains and losses on foreign currency transactions are included in the consolidated statements of operations and comprehensive loss within other income (expenses), net.

## Fair Value of Financial Instruments

The Company is required to disclose information on all assets and liabilities reported at fair value that enables an assessment of the inputs used in determining the reported fair values. The fair value hierarchy is a hierarchy of

inputs used in measuring fair value that maximizes the use of observable inputs and minimizes the use of unobservable inputs by requiring that the observable inputs be used when available. Observable inputs are inputs that market participants would use in pricing the financial instrument based on market data obtained from sources independent of the Company. Unobservable inputs are inputs that reflect the Company's assumptions about the inputs that market participants would use in pricing the financial instrument and are developed based on the information available in the circumstances. The fair value hierarchy applies only to the valuation inputs used in determining the reported fair value of the investments and is not a measure of the investment credit quality. The hierarchy defines three levels of valuation inputs:

Level 1—Unadjusted quoted prices in active markets that are accessible at the measurement date of identical, unrestricted assets.

Level 2—Quoted prices for similar assets, or inputs that are observable, either directly or indirectly, for substantially the full term through corroboration with observable market data. Level 2 includes investments valued at quoted prices adjusted for legal or contractual restrictions specific to the security.

Level 3—Pricing inputs are unobservable for the asset, that is, inputs that reflect the reporting entity's own assumptions about the assumptions market participants would use in pricing the asset. Level 3 includes private investments that are supported by little or no market activity.

Cash, cash equivalents and restricted cash are Level 1 assets which are comprised of funds held in checking and money market accounts. Cash, cash equivalents and restricted cash were recorded at fair value as of December 31, 2018 and 2017, totaling \$178.4 million and \$146.1 million, respectively. The carrying amounts of accounts payable and accrued expenses approximate their fair values due to their short-term maturities. Accounts receivable relate to the Company's collaboration agreements.

## Concentration of Credit Risk

Cash and cash equivalents are financial instruments that potentially subject the Company to concentration of credit risk. The Company uses several financial institutions to maintain its cash and cash equivalents, all of which are high quality, accredited financial institutions and, accordingly, such funds are subject to minimal credit risk. The Company has not experienced any losses in such accounts and management believes that the Company is not exposed to significant credit risk due to the financial position of the depository institutions in which those deposits are held. The Company has no financial instruments with off-balance sheet risk of loss.

## **Restricted Cash**

Restricted cash consists primarily of cash placed in separate restricted bank accounts as required under the terms of the Company's lease agreements for its Cambridge, Massachusetts and Lexington, Massachusetts facilities (refer to Note 8). As of December 31, 2018 and 2017, the Company had \$3.6 million of restricted cash, of which \$2.6 million related to the Lexington facility and \$1.0 million related to the Cambridge facility.

## **Property and Equipment**

Property and equipment, which consists primarily of equipment, furniture, software and leasehold improvements, are stated at cost less accumulated depreciation. Depreciation is calculated on a straight-line basis over the following estimated useful lives of the assets:

Equipment, Furniture and Software Leasehold Improvements 3-7 years Shorter of asset life or lease term

Depreciation begins at the time the asset is placed in service. Maintenance and repairs are charged to operations as incurred. Upon retirement or sale, the cost of the disposed asset and the related accumulated depreciation are removed from the accounts and any resulting gain or loss is reflected in the consolidated statements of operations and comprehensive loss.

## Impairment of Long-Lived Assets

Long-lived assets consist of property and equipment. Long-lived assets are reviewed for impairment whenever events or other changes in circumstances indicate that the carrying amount may not be recoverable. Certain factors may exist or events may occur that indicate that impairment exists including, but not limited to, the following: significant underperformance relative to historical or projected future operating results; significant changes in the manner of use of the underlying assets; and significant adverse industry or market economic trends.

When performing the impairment assessment for long-lived assets, the Company compares the carrying value of such assets to the estimated undiscounted future net cash flows expected from the use of the assets and their eventual disposition. In the event that the carrying value of the assets is determined to be unrecoverable, the Company would estimate the fair value of the assets and record an impairment charge for the excess of the carrying value over the fair value.

## **Revenue Recognition**

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

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

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

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

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

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

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

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

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

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

For additional discussion of accounting for collaboration revenues, see Note 5.

## **Product Revenue**

The Company has had no product revenue to date.

## **Research and Development Expenses**

Research and development expenses are expensed as incurred. External development costs are recognized based on an evaluation of the progress to completion of specific tasks. Payments for these activities are based on the

terms of the individual agreements, which may differ from the pattern of costs incurred, and are reflected in the accompanying consolidated balance sheets as prepaid or accrued expenses.

## **Refundable Tax Credits**

The Company is eligible for refundable tax credits with tax authorities for certain qualified operating expenses. The Company recognizes refundable tax credits when there is reasonable assurance that the Company will comply with the requirements of the refundable tax credit and that the refundable tax credit will be received.

Refundable tax credits are recorded as income and classified in other income (expense), net in the consolidated statements of operations and comprehensive loss.

## Net Loss per Share

Basic net loss per share is computed using the weighted-average number of ordinary shares outstanding during the period. Diluted net loss per share is computed using the sum of the weighted-average number of ordinary shares outstanding during the period and, if dilutive, the weighted-average number of potential ordinary shares, including the assumed exercise of share options.

The Company applies the two-class method to calculate its basic and diluted net loss per share attributable to ordinary shareholders, as its Series A preferred shares are participating securities. The two-class method is an earnings allocation formula that treats a participating security as having rights to earnings that otherwise would have been available to ordinary shareholders. However, for the periods presented, the two-class method does not impact the net loss per ordinary share as the Company was in a net loss position for each of the periods presented and holders of Series A preferred shares do not participate in losses.

The Company's Series A preferred shares contractually entitle the holders of such shares to participate in dividends but do not contractually require the holders of such shares to participate in losses of the Company. Accordingly, for periods in which the Company reports a net loss attributable to ordinary shareholders, diluted net loss per share attributable to ordinary shareholders is the same as basic net loss per share attributable to ordinary shareholders, since dilutive ordinary shares are not assumed to have been issued if their effect is anti-dilutive.

## License Agreements and Patent Costs

Costs associated with licenses of technology and patent costs are expensed as incurred and are generally included in research and development expense in the consolidated statements of operations and comprehensive loss.

### Share-Based Compensation

The Company measures and recognizes share-based compensation expense, for both employee and director option awards, based on the grant date fair value of the awards. The Company calculates the fair value of restricted share unit awards based on the grant date fair value of the underlying ordinary shares. The Company recognizes share-based compensation expense on a straight-line basis over the requisite service period of the awards, which is generally the vesting period.

The Company determines the fair value of share-based awards granted to non-employees as either the fair value of the consideration received or the fair value of the equity instruments issued, whichever is more reliably

measurable. All equity instruments issued to non-employees as consideration for goods or services received by the Company are accounted for based on the fair value of the equity instruments issued. These awards are recorded in expense and additional paid-in capital in shareholders' equity over the applicable service periods based on the fair value of the options at the end of each period. The Company accounts for the expense from share-based awards to non-employees by re-measuring the awards at fair value over the vesting period.

The Company classifies share-based compensation expense in its consolidated statements of operations and comprehensive loss in the same manner in which the award recipient's compensation costs are classified or in which the award recipient's service payments are classified.

The fair value of each share option grant was determined using the methods and assumptions discussed below. These inputs are generally subjective and require significant judgment and estimation by management.

- *Fair Value of Ordinary Shares* The fair value of the ordinary shares underlying the Company's share-based awards is based on the closing price of the Company's ordinary shares as reported by the Nasdaq Global Market on the date of grant.
- *Expected Term* The expected term of share options represents the weighted-average period that the share options are expected to remain outstanding. The Company estimated the expected term using the simplified method, which is an average of the contractual term of the option and the vesting period.
- *Expected Volatility* Since there is limited historical data for the Company's ordinary shares and limited company-specific historical volatility, it has determined the share price volatility for options granted based on an analysis of the volatility used by a peer group of publicly traded companies. In evaluating similarity, the Company considers factors such as industry, stage of life cycle and size.
- *Risk-free Interest Rate* The risk-free interest rate is based on the U.S. Treasury yield in effect at the time of the grant for zero-coupon U.S. Treasury notes with remaining terms similar to the expected term of the options.
- Dividend Rate The expected dividend was assumed to be zero as the Company has never paid dividends and has no current plans to do so.

## Income Taxes

The Company accounts for income taxes using an asset and liability approach, which requires recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been recognized in the consolidated financial statements, but have not been reflected in taxable income. A valuation allowance is established to reduce deferred tax assets to their estimated realizable value. Therefore, the Company provides a valuation allowance to the extent that it is more likely than not that all or a portion of the deferred tax assets will not be realized in the future.

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

The Company recognizes interest and penalties related to uncertain tax positions in the income tax provision on the consolidated statements of operations and comprehensive loss.

The Company has certain service arrangements in place between its U.S., Japan, UK and Singapore entities, which include transfer pricing assumptions. The determination of the appropriate level of transfer pricing requires judgment based on transfer pricing analyses of comparable companies. The Company monitors the nature of its service arrangements for changes in its operations as well as economic conditions. The Company also periodically reviews the transfer pricing analyses for changes in the composition in the pool of comparable companies as well as the related ongoing results of the comparable companies.

## **Recently Issued Accounting Pronouncements**

In February 2016, the Financial Accounting Standards Board (the "FASB") issued Accounting Standards Update ("ASU") No. 2016-02, Leases ("ASU 2016-02"), which was further clarified in July 2018 when the FASB issued Accounting Standards Update No. 2018-10, Codification Improvements to Topic 842, Leases ("ASU 2018-10") and Accounting Standards Update No. 2018-11, Leases (Topic 842)—Targeted Improvements ("ASU 2018-11"). ASU 2016-02, ASU 2018-10 and ASU 2018-11 require a lessee to recognize assets and liabilities on the balance sheet for operating leases and changes many key definitions, including the definition of a lease. The update includes a short-term lease exception for leases with a term of 12 months or less, in which a lessee can make an accounting policy election not to recognize lease assets and lease liabilities. Lessees will continue to differentiate between finance leases (previously referred to as capital leases) and operating leases, using classification criteria that are substantially similar to the previous guidance. For lessees, the recognition, measurement, and presentation of expenses and cash flows arising from a lease have not significantly changed from previous U.S. GAAP. Lessees and lessors are required to recognize and measure leases at the beginning of the earliest period presented using a modified retrospective approach. The modified retrospective approach includes a number of optional practical expedients that entities may elect to apply, as well as transition guidance specific to nonstandard leasing transactions. ASU 2016-02, ASU 2018-10 and ASU 2018-11 are effective for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years. The adoption of the new standard will result in the recognition of a material right-of-use asset and lease liability on the Company's consolidated balance sheet. The Company does not expect the adoption of the new standard to have a material impact on its consolidated statement of operations or its liquidity.

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

In March 2018, the FASB issued Accounting Standards Update No. 2018-05, Income Taxes (Topic 740): Amendments to SEC Paragraphs Pursuant to SEC Staff Accounting Bulletin No. 118 ("ASU 2018-05"). The standard amends Accounting Standards Codification 740, Income Taxes ("ASC 740"), to provide guidance on accounting for the tax effects of the Tax Act pursuant to Staff Accounting Bulletin No. 118. As of December 31, 2018, the Company has finalized its accounting for the impact of 2018-05. In 2018, the Company recognized a \$0.2 million benefit related to the remeasurement of its deferred tax assets and liabilities as a result of filing its 2017 U.S. tax return.

In November 2018, the FASB issued Accounting Standards Update No. 2018-18, Collaborative Arrangements (Topic 808): Clarifying the Interaction between Topic 808 and Topic 606 ("ASU 2018-18"). The standard amends Accounting Standards Codification 808, Collaborative Agreements and Accounting Standards Codification 606, Revenue from Contracts with Customers, to clarify the interaction between collaborative arrangement participants that should be accounted for as revenue under ASC 606. In transactions when the collaborative arrangement participant is a customer in the context of a unit of account, revenue should be accounted for using the guidance in Topic 606. The amendments in Update No. 2018-18 are effective for fiscal years beginning after December 15, 2019, and interim periods within those fiscal years. The Company is currently evaluating the new guidance included in ASU 2018-18, but does not expect it to have a material impact on its consolidated financial statements.

## **Recently Adopted Accounting Pronouncements**

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

## Impact of Adoption

As a result of adopting ASC 606 on January 1, 2018, the Company has revised its comparative financial statements for the prior year as if ASC 606 had been effective for that period. As a result, the following financial statement line items were affected as of December 31, 2017 and for the years ended December 31, 2017 and 2016.

## **Consolidated Balance Sheets**

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

### **Consolidated Statements of Operations and Comprehensive Loss**

	As revised under ASC 606				
Revenue	\$ 3,893	\$	3,704	\$	189
Loss from operations	(102,391)		(102,580)		189
Income tax benefit (provision)	(842)		(708)		(134)
Net loss	(101,980)		(102,035)		55

11,015

393

		For the Year End	led December 31, 201	6	
	s revised er ASC 606		ally reported r ASC 605	Effect	of change
		(in thousands, e	except per share data)		
Revenue	\$ 1,092	\$	1,485	\$	(393)
Loss from operations	(55,720)		(55,327)		(393)
Income tax benefit (provision)	(482)		(616)		134
Net loss	(55,660)		(55,401)		(259)
Net loss per share attributable to ordinary shareholders—basic and					
diluted	\$ (2.44)	\$	(2.43)	\$	(0.01)

## **Consolidated Statement of Cash Flows**

Deferred revenue

	As revised under ASC 606	or the Year Ended December 31, 201 As originally reported under ASC 605	7 Effect of change
		(in thousands)	<u>v</u> .
Net loss	\$ (101,980)	\$ (102,035)	\$55
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:			
Deferred income taxes	908	774	134
Changes in operating assets and liabilities:			
Deferred revenue	(2,893)	(2,704)	(189)
	As revised	or the Year Ended December 31, 2016 As originally reported	5
	under ASC 606	under ASC 605	Effect of change
NT-( ]		(in thousands)	¢ (250)
Net loss	\$ (55,660)	\$ (55,401)	\$ (259)
Adjustments to reconcile net loss to net cash provided by (used in)			
operating activities:			
Deferred income taxes	(698)	(564)	(134)
Changes in operating assets and liabilities:			

The most significant changes relate to the Company's revenue recognition pattern for the Pfizer Collaboration Agreement (as defined in Note 5) and the accounting for milestone payments.

11,408

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

Under ASC 605, the Company recognized revenue related to milestone payments as the milestone was achieved, using the milestone method. Under ASC 606, the Company performs an assessment of the probability of milestone achievement at each reporting date and determines whether the cumulative revenue related to the milestone is at risk of significant reversal.

In October 2016, the FASB issued Accounting Standards Update No. 2016-16, Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory ("ASU 2016-16"). Under the new guidance, companies are

required to recognize the income tax consequences of an intra-entity transfer of an asset, other than inventory, when the transfer occurs, even though the pre-tax effects of that transaction are eliminated in consolidation. The amendments are effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2017. The Company adopted ASU 2016-16 effective January 1, 2018, which resulted in a \$0.4 million cumulative-effect adjustment to retained earnings.

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

## 3. PROPERTY AND EQUIPMENT, NET

Property and equipment, net, consists of the following:

	Decen	mber 31,
	2018	2017
	(in th	ousands)
Furniture and equipment	\$20,300	\$13,626
Software	435	108
Leasehold improvements	27,342	16,029
Fixed assets in progress	1,354	1,988
Total	49,431	31,751
Less accumulated depreciation	(9,500)	(4,417)
Property and equipment, net	\$39,931	\$27,334

Depreciation expense was \$5.6 million, \$2.2 million and \$0.8 million for the years ended December 31, 2018, 2017 and 2016, respectively.

## 4. ACCRUED EXPENSES AND OTHER CURRENT LIABILITIES

Accrued expenses and other current liabilities consist of the following:

	Decen	nber 31,
	2018	2017
	(in the	ousands)
Accrued compensation	\$ 7,507	\$5,461
Accrued expenses related to CROs and CMOs	5,502	3,281
Accrued expenses and other current liabilities	1,727	156
Total accrued expenses and other current liabilities	\$14,736	\$8,898

## 5. COLLABORATION AGREEMENTS

### **Pfizer Collaboration and Equity Agreements**

In May 2016, the Company entered into a Research, License and Option Agreement (as amended in November 2017, the "Pfizer Collaboration Agreement") with Pfizer Inc. ("Pfizer"). Pursuant to the terms of the Pfizer Collaboration Agreement, the Company and Pfizer agreed to collaborate on the discovery, development and commercialization of stereopure oligonucleotide therapeutics for up to five programs (the "Pfizer Programs"), each directed at a genetically-defined hepatic target selected by Pfizer (the "Pfizer Collaboration"). The Company received \$10.0 million as an upfront license fee under the Pfizer Collaboration Agreement. Subject to option exercises by Pfizer, the Company may earn potential research, development and commercial milestone payments, plus royalties, tiered up to low double-digits, on sales of any products that may result from the Pfizer Collaboration. None of the payments under the Pfizer Collaboration Agreement are refundable.

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

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

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

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

The Pfizer Collaboration is managed by a joint steering committee in which both parties are represented equally, which will oversee the scientific progression of each Pfizer Program up to the clinical candidate stage. During the four-year research term and for a period of two years thereafter, the Company has agreed to work exclusively with Pfizer with respect to using any of the Company's stereopure oligonucleotide technology that is specific for

the applicable hepatic target which is the basis of any Pfizer Program. Within a specified period after receiving a data package for a candidate under each nominated program, Pfizer may exercise an option to obtain a license to develop, manufacture and commercialize the program candidate by paying an exercise price per program.

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

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

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

During the year ended December 31, 2017, it became probable that a significant reversal of cumulative revenue would not occur for a developmental milestone under the Pfizer Collaboration Agreement. At such time, the associated consideration was added to the estimated transaction price and allocated to the existing performance obligations, and the Company recognized a cumulative catch-up to revenue for this developmental milestone, representing the amount that would have been recognized had the milestone payment been included in the transaction price from the outset of the arrangement. The remainder will be recognized in the same manner as the remaining, unrecognized transaction price over the remaining period until each performance obligation is satisfied.

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

Pfizer nominated the third, fourth and fifth hepatic targets in August 2016, March 2018 and April 2018, respectively. Upon each exercise, the Company allocated the transaction price amount allocated to the material right at inception of the arrangement plus the program nomination option exercise fee paid by Pfizer at the time of exercising the option to a new performance obligation, which will be recognized as revenue as the research and development services are provided using the same method as the performance obligations relating to Programs 1 and 2.

Through December 31, 2018, the Company had recognized revenue of \$9.9 million as collaboration revenue in the Company's consolidated statements of operations and comprehensive loss under the Pfizer Collaboration Agreement. During the years ended December 31, 2018, 2017 and 2016, the Company recognized revenue of \$4.9 million, \$3.9 million and \$1.1 million, respectively, under the Pfizer Collaboration Agreement. The aggregate amount of the transaction price allocated to the Company's partially unsatisfied performance obligations and recorded in deferred revenue at December 31, 2018 is \$8.7 million, of which \$6.8 million is included in current liabilities. The Company expects to recognize the remaining deferred revenue according to FTE hours incurred, over the remaining research term, which is 16 months as of December 31, 2018.

## Takeda Collaboration and Equity Agreements

In February 2018, Wave USA and Wave UK entered into a global strategic collaboration (the "Takeda Collaboration") with Takeda Pharmaceutical Company Limited ("Takeda"), pursuant to which Wave USA, Wave UK and Takeda agreed to collaborate on the research, development and commercialization of oligonucleotide therapeutics for disorders of the Central Nervous System ("CNS"). The Takeda Collaboration provides Wave with at least \$230.0 million in committed cash and Takeda with the option to co-develop and co-commercialize Wave's CNS development programs in (1) Huntington's disease ("HD"); (2) amyotrophic lateral sclerosis ("ALS") and frontotemporal dementia ("FTD"); and (3) Wave's discovery-stage program targeting *ATXN3* for the treatment of spinocerebellar ataxia 3 ("SCA3") (collectively, "Category 1 Programs"). In addition, Takeda will have the right to exclusively license multiple preclinical programs for CNS disorders, including Alzheimer's disease and Parkinson's disease (collectively, "Category 2 Programs"). In April 2018, the Takeda Collaboration became effective and Takeda paid Wave \$110.0 million as an upfront payment. 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.

Simultaneously with Wave USA and Wave UK's entry into the collaboration and license agreement with Takeda (the "Takeda Collaboration Agreement"), the Company entered into a share purchase agreement with Takeda (the "Takeda Equity Agreement," and together with the Takeda Collaboration Agreement, the "Takeda Agreements") pursuant to which it agreed to sell to Takeda 1,096,892 of its ordinary shares at a purchase price of \$54.70 per share. In April 2018, the Company closed the Takeda Equity Agreement and received aggregate cash

proceeds of \$60.0 million. The Company did not incur any material costs in connection with the issuance of shares.

With respect to Category 1 Programs, Wave will be responsible for researching and developing products and companion diagnostics for Category 1 Programs through completion of the first proof of mechanism study for such products. Takeda will have an exclusive option for each target and all associated products and companion diagnostics for such target, which it may exercise at any time through completion of the proof of mechanism study. If Takeda exercises this option, Wave will receive an opt-in payment and will lead manufacturing and joint clinical co-development activities and Takeda will lead joint co-commercial activities in the United States and all commercial activities outside of the United States. Global costs and potential profits will be shared 50:50 and Wave will be eligible to receive development and commercial milestone payments. In addition to its 50% profit share, Wave is eligible to receive option exercise fees and development and commercial milestone payments for each of the Category 1 Programs.

With respect to Category 2 Programs, Wave has granted Takeda the right to exclusively license multiple preclinical programs during a four-year research term (subject to limited extension for programs that were initiated prior to the expiration of the research term, in accordance with the Takeda Collaboration Agreement) ("Category 2 Research Term"). During that term, the parties may collaborate on preclinical programs for up to six targets at any one time. Wave will be responsible for researching and preclinically developing products and companion diagnostics directed to the agreed upon targets through completion of IND-enabling studies in the first major market country. Thereafter, Takeda will have an exclusive worldwide license to develop and commercialize products and companion diagnostics directed to such targets, subject to Wave's retained rights to lead manufacturing activities for products directed to such targets. Takeda will fund Wave's research and preclinical activities in the amount of \$60.0 million during the research term and will reimburse Wave for any collaboration-budgeted research and preclinical expenses incurred by Wave that exceed that amount. Wave is also eligible to receive tiered high single-digit to mid-teen royalties on Takeda's global commercial sales of products from each Category 2 Program.

Under the Takeda Collaboration Agreement, each party grants to the other party specific intellectual property licenses to enable the other party to perform its obligations and exercise its rights under the Takeda Collaboration Agreement, including license grants to enable each party to conduct research, development and commercialization activities pursuant to the terms of the Takeda Collaboration Agreement.

The term of the Takeda Collaboration Agreement commenced on April 2, 2018 and, unless terminated earlier, will continue until the date on which: (i) with respect to each Category 1 Program target for which Takeda does not exercise its option, the expiration or termination of the development program with respect to such target; (ii) with respect to each Category 1 Program target for which Takeda exercises its option, the date on which neither party is researching, developing or manufacturing any products or companion diagnostics directed to such target; or (iii) with respect to each Category 2 Program target, the date on which royalties are no longer payable with respect to products directed to such target.

Takeda may terminate the Takeda Collaboration Agreement for convenience on 180 days' notice, in its entirety or on a target-by-target basis. Subject to certain exceptions, each party has the right to terminate the Takeda Collaboration Agreement on a target-by-target basis if the other party, or a third party related to such party, challenges the patentability, enforceability or validity of any patents within the licensed technology that cover any product or companion diagnostic that is subject to the Takeda Collaboration Agreement. In the event of any material breach of the Takeda Collaboration Agreement by a party, subject to cure rights, the other party may terminate the Takeda Collaboration Agreement in its entirety if the breach relates to all targets or on

a target-by-target basis if the breach relates to a specific target. In the event that Takeda and its affiliates cease development, manufacturing and commercialization activities with respect to compounds or products subject to the Takeda Collaboration Agreement and directed to a particular target, Wave may terminate the Takeda Collaboration Agreement with respect to such target. Either party may terminate the Takeda Collaboration Agreement for the other party's insolvency. In certain termination circumstances, Wave would receive a license from Takeda to continue researching, developing and manufacturing certain products, and companion diagnostics.

The Company assessed this arrangement in accordance with ASC 606 and concluded that the contract counterparty, Takeda, is a customer for Category 1 Programs prior to Takeda exercising its option, and for Category 2 Programs during the Category 2 Research Term. The Company identified the following material promises under the arrangement: (1) the non-exclusive, royalty-free research and development license for each Category 1 Program; (2) the research and development services for each Category 1 Program through completion of the first proof of mechanism study; (3) the exclusive option to license, co-develop and co-commercialize each Category 1 Program; (4) the right to exclusively license the Category 2 Programs; and (5) the research and preclinical development services of the Category 2 Programs through completion of IND-enabling studies. The research and development services for each Category 1 Program. The research and development license and should therefore be combined into a single performance obligation for each Category 1 Program. The research and preclinical development services for the Category 2 Programs and should therefore be combined into a single performance obligation.

Additionally, the Company determined that the exclusive option for each Category 1 Program was priced at a discount and, as such, provide material rights to Takeda, representing three separate performance obligations. Based on these assessments, the Company identified seven performance obligations in the Takeda Collaboration Agreement: (1) research and development services through completion of the first proof of mechanism and non-exclusive research and development license for HD; (2) research and development services through completion of the first proof of mechanism and non-exclusive research and development license for ALS and FTD; (3) research and development services through completion of the first proof of mechanism and non-exclusive research and development license for SCA3; (4) the material right provided for the exclusive option to license, co-develop and co-commercialize HD; (5) the material right provided for the exclusive option to license, co-develop and co-commercialize ALS and FTD; (6) the material right provided for the exclusive option to license, co-develop and co-commercialize ALS and preclinical development services and right to exclusively license the Category 2 Programs.

At the outset of the arrangement, the transaction price included the \$110.0 million upfront consideration received and the \$60.0 million of committed research and preclinical funding for the Category 2 Programs. The Company determined that the Takeda Collaboration Agreement did not contain a significant financing component. The option exercise fees to license, co-develop and co-commercialize each Category 1 Program that may be received are excluded from the transaction price until each customer option is exercised. The potential milestone payments were excluded from the transaction price, as all milestone amounts were fully constrained at the inception of the Takeda Collaboration Agreement. The Company will reevaluate the transaction price at the end of each reporting period and, as uncertain events are resolved or other changes in circumstances occur, if necessary, will adjust its estimate of the transaction price.

Revenue associated with the research and development services for each Category 1 Program performance obligation is being recognized as the research and development services are provided using an input method, according to the costs incurred on each Category 1 Program and the total costs expected to be incurred to satisfy

each Category 1 Program performance obligation. Revenue associated with the research and preclinical development services for the Category 2 Programs performance obligation is being recognized as the research and preclinical development services are provided using an input method, according to the costs incurred on Category 2 Programs and the total costs expected to be incurred to satisfy the performance obligation. The transfer of control for these performance obligations occurs over time and, in management's judgment, this input method is the best measure of progress towards satisfying the performance obligations. The amount allocated to the material right for each Category 1 Program option will be recognized on the date that Takeda exercises each respective option, or immediately as each option expires unexercised. The amounts received that have not yet been recognized as revenue are recorded in deferred revenue on the Company's consolidated balance sheet.

During the year ended December 31, 2018, the Company recognized revenue of \$9.6 million in the Company's consolidated statements of operations and comprehensive loss under the Takeda Collaboration Agreement. The aggregate amount of the transaction price allocated to the Company's unsatisfied and partially unsatisfied performance obligations and recorded in deferred revenue at December 31, 2018 is \$160.4 million, of which \$94.1 million is included in current liabilities. The Company expects to recognize revenue for the portion of the deferred revenue that relates to the research and development services for each Category 1 Program and the Category 2 Programs as costs are incurred over the remaining research term. The Company expects to recognize revenue that relates to the material right for each Category 1 Program option upon Takeda's exercise of such option, or immediately as each option expires unexercised. The aggregate amount of the transaction price included in accounts receivable at December 31, 2018 is \$60.0 million, of which \$10.0 million is included in current assets.

## 6. SHARE CAPITAL

The following represents the historical ordinary share transactions of the Company from December 31, 2015 through December 31, 2018:

- In May 2016, the Company granted 1,875,000 ordinary shares to Pfizer under the Pfizer Agreements (Note 5) at a purchase price of \$16.00 per share, for an aggregate purchase price of \$30.0 million.
- In April 2017, the Company closed a follow-on underwritten public offering of 4,166,667 ordinary shares at a purchase price of \$24.00 per share for gross proceeds of \$100.0 million. The net proceeds from this issuance were \$93.5 million after deducting underwriting discounts and commissions and other offering expenses.
- In April 2018, the Company granted 1,096,892 ordinary shares to Takeda under the Takeda Collaboration Agreement (Note 5) at a purchase price of \$54.70 per share, for an aggregate purchase price of \$60.0 million.

## Features of the Series A Preferred Shares and Ordinary Shares

The Series A preferred shares and ordinary shares have no par value and there is no concept of authorized share capital under Singapore law. The Series A preferred shares are not redeemable.

## Voting

The holders of Series A preferred shares are not entitled to vote on any of the matters proposed to shareholders, other than as specified in the Company's Constitution. The holders of ordinary shares are entitled to one vote for each ordinary share held at all meetings of shareholders and written actions in lieu of meetings.

## Dividends

All dividends, if any, shall be declared and paid pro rata according to the number of shares held by each member entitled to receive dividends. The Company's board of directors may deduct from any dividend all sums of money presently payable by the member to the Company on account of calls.

#### Liquidation

In the event of a liquidation, dissolution or winding up of, or a return of capital by the Company, the ordinary shares will rank equally with the Series A preferred shares after the payment of the liquidation preference of an aggregate of approximately \$10 thousand for Series A preferred shares.

#### 7. SHARE-BASED COMPENSATION

In December 2014, the Company's board of directors adopted the Wave Life Sciences Ltd. 2014 Equity Incentive Plan (the "2014 Plan"), and reserved 1,763,714 ordinary shares for issuance under this plan, which was increased to 5,064,544 in 2015, to 6,064,544 in 2017 and to 6,943,344 in 2018. The 2014 Plan authorizes the board of directors or a committee of the board to grant incentive share options, non-qualified share options, share appreciation rights, restricted awards, which include restricted shares and restricted share units ("RSUs"), and performance awards to eligible employees, consultants and directors of the Company. The company accounts for grants to its board of directors as grants to employees.

As of December 31, 2018, 1,545,151 ordinary shares remained available for future grant under the 2014 Plan.

Share option activity under the 2014 Plan is summarized as follows:

	Number of Shares	Weighted- Average Exercise Price	Weighted- Average Remaining Contractual Term (in years)	Intr	ggregate insic Value iousands)(1)
Outstanding as of January 1, 2018	3,767,130	\$ 12.69			
Granted	830,420	44.77			
Exercised	(507,632)	10.07			
Forfeited or cancelled	(73,328)	19.93			
Outstanding as of December 31, 2018	4,016,590	\$ 19.47	7.24	\$	93,520
Options exercisable as of December 31, 2018	2,451,584	\$ 10.11	6.51	\$	78,280
Options unvested as of December 31, 2018	1,565,006	\$ 34.14	8.39	\$	15,240

(1) The aggregate intrinsic value of options is calculated as the difference between the exercise price of the share options and the fair value of the Company's ordinary shares for those share options that had exercise prices lower than the fair value of the ordinary shares as of the end of the period.

Options generally vest over periods of one to four years, and options that are forfeited or cancelled are available to be granted again. The contractual life of options is generally five or ten years from the grant date.

The assumptions used in the Black-Scholes option pricing model to determine the fair value of share options granted to employees during the period were as follows:

	For	the Year Ended December 31,	
	2018	2017	2016
Risk-free interest rate	2.49% - 3.01%	1.49% - 2.23%	1.15% - 2.18%
Expected term (in years)	3.00 - 6.25	3.00 - 6.25	3.00 - 6.25
Expected volatility	64.17% - 70.90%	68.95% - 72.24%	60.89% - 68.76%
Expected dividend yield	0%	0%	0%

There were no options granted to non-employees in 2018, 2017 or 2016. The options that were granted to non-employees in 2015 were fully vested as of December 31, 2018.

RSU activity for the year ended December 31, 2018 is summarized as follows:

	RSUs	Da Va dol	age Grant ite Fair ilue (in lars per hare)
Outstanding as of January 1, 2018	154,459		29.05
Granted	313,747		40.17
Vested	(38,594)		26.30
Forfeited	(21,091)		37.27
RSUs Outstanding at December 31, 2018	408,521	\$	37.16

RSUs generally vest over periods of one to four years. RSUs that are forfeited are available to be granted again.

As of December 31, 2018, the unrecognized compensation cost related to outstanding options was \$29.0 million for employees. The unrecognized compensation cost related to outstanding options for employees is expected to be recognized over a weighted-average period of approximately 2.8 years. For the years ended December 31, 2018, 2017 and 2016, the weighted-average grant date fair value per granted option was \$27.90, \$16.58 and \$30.23, respectively. The aggregate fair value of options that vested during the years ended December 31, 2018, 2017 and 2016, was \$9.3 million, \$11.5 million and \$4.7 million, respectively. The unrecognized compensation costs related to outstanding RSUs was \$11.5 million as of December 31, 2018, and is expected to be recognized over a weighted-average period of approximately 2.89 years. The total fair value of RSUs vested during the years ended December 31, 2018 and 2017 was \$1.8 million and \$0.4 million, respectively. No RSUs vested during the year ended December 31, 2016.

Share-based compensation expense for the years ended December 31, 2018, 2017 and 2016 is classified as operating expenses in the consolidated statements of operations and comprehensive loss as follows:

	For the	For the Year Ended December 31,	
	2018	2017	2016
		(in thousands)	
Research and development expenses	\$ 9,172	\$ 7,670	\$ 4,936
General and administrative expenses	6,424	4,473	1,911
Total share-based compensation expense	\$15,596	\$12,143	\$ 6,847

Of the total share-based compensation expense recorded for the years ended December 31, 2018, 2017 and 2016, \$1.4 million, \$2.9 million and \$2.7 million, respectively, related to options granted to non-employees, all of which is included in research and development expenses on the consolidated statements of operations and comprehensive loss.

# 8. COMMITMENTS AND CONTINGENCIES

## Lease Arrangements

The Company enters into lease arrangements for its facilities as well as certain equipment. A summary of the arrangements are as follows:

## **Operating Leases**

On September 26, 2016, and as amended on December 31, 2016, the Company entered into a 10 year and 9 month lease, which includes two successive five year renewal options, for its facility in Lexington, Massachusetts, which the Company uses primarily for its cGMP manufacturing, as well as for additional laboratory and office space. Throughout the term of the lease, the Company is responsible for paying certain costs and expenses, in addition to the rent, as specified in the lease, including a proportionate share of applicable taxes, operating expenses and utilities. As required under the terms of the lease agreement, the Company has placed restricted cash of \$2.6 million in a separate bank account at December 31, 2018 and 2017.

As of December 31, 2018, the Company has received the \$11.4 million of tenant improvement allowances to which it was entitled per the lease for the Lexington, Massachusetts facility; of which \$8.5 million, \$2.8 million and \$0.1 million were received during the years ended December 31, 2018, 2017 and 2016. The lease obligation related to the tenant improvement allowance is amortized over the period from the commencement of tenant improvement construction through to the end of the original lease term.

In April 2015, the Company entered into a lease agreement for an office and laboratory facility in Cambridge, Massachusetts, which commenced in October 2015 with a term of 7.5 years with a five-year renewal option to extend the lease. As required under the terms of the lease agreement, the Company has placed restricted cash of \$1.0 million in a separate bank account at December 31, 2018 and 2017.

Future minimum lease payments under the Company's non-cancelable operating leases as of December 31, 2018, are as follows:

For the Year Ended December 31,	Amount (in thousands)
2019	\$ 5,675
2020	5,846
2021	6,021
2022	6,201
2023	5,236
Thereafter	20,927
	\$ 49,906

The Company recorded rent expense of \$4.9 million, \$5.6 million and \$1.5 million for the years ended December 31, 2018, 2017 and 2016, respectively.

## **Unasserted Claims**

In the ordinary course of business, the Company may be subject to legal proceedings, claims and litigation as the Company operates in an industry susceptible to patent and other legal claims. The Company accounts for estimated losses with respect to legal proceedings and claims when such losses are probable and estimable. Legal costs associated with these matters are expensed when incurred. The Company is not currently a party to any material legal proceedings.

# 9. NET LOSS PER ORDINARY SHARE

Basic loss per share is computed by dividing net loss attributable to ordinary shareholders by the weighted-average number of ordinary shares outstanding:

		Year Ended December 31,		
	2018	2017	2016	
	(in thous	(in thousands except share and per share data)		
Numerator:				
Net loss attributable to ordinary shareholders	\$ (146,653)	\$ (101,980)	\$ (55,660)	
Denominator:				
Weighted-average ordinary shares outstanding	28,970,404	26,513,382	22,800,628	
Net loss per share, basic and diluted	\$ (5.06)	\$ (3.85)	\$ (2.44)	

The Company's potentially dilutive shares, which include outstanding share options to purchase ordinary shares and restricted share units, are considered to be ordinary share equivalents and are only included in the calculation of diluted net loss per share when their effect is dilutive.

The following potential ordinary shares, presented based on amounts outstanding at each period end, were excluded from the calculation of diluted net loss per share attributable to ordinary shareholders for the periods indicated because including them would have had an anti-dilutive effect:

	As of Dece	As of December 31,	
	2018	2017	
Options to purchase ordinary shares	4,016,590	3,767,130	
RSUs	408,521	154,459	
Series A preferred shares	3,901,348	3,901,348	

## **10. INCOME TAXES**

During the years ended December 31, 2018, 2017 and 2016, the Company recorded a tax provision of \$0.1 million, \$0.8 million and \$0.5 million, respectively. The 2018 tax provision was due to adjustments related to the filing of the Company's 2017 tax returns with the relevant tax authorities. The 2017 tax provision was due to the Company's establishment of a valuation allowance against the Company's U.S. deferred tax assets, as well as income generated under research and management services arrangements between the Company's U.S. and Singapore entities, which is taxed in the United States. The 2016 tax provision was primarily the result of income generated under research and management services arrangements between the Company's U.S. and Singapore entities, which is taxed in the United States.

During the year ended December 31, 2018, the Company recorded no income tax benefit for the net operating losses incurred in Singapore, the United States, Japan and the United Kingdom, due to uncertainty regarding future taxable income in those jurisdictions. During the year ended December 31, 2017, the Company recorded no income tax benefit for the net operating losses incurred in Singapore and the United Kingdom, due to uncertainty regarding future taxable income and the United Kingdom, due to uncertainty regarding future taxable income in those jurisdictions. During the year ended December 31, 2016, the Company recorded no income tax benefit for the net operating losses incurred in Singapore and Japan, due to uncertainty regarding future taxable income in those jurisdictions. In May 2016, the Company established a wholly-owned subsidiary in Ireland, however no income tax expense or benefit has been recorded during the years ended December 31, 2018, 2017 or 2016.

The Tax Cuts and Jobs Act (the "Tax Act") was enacted on December 22, 2017 and includes significant changes to the U.S. corporate tax system. Effective January 1, 2018, the Tax Act reduced the U.S. federal corporate tax rate from 35% to 21% and transitioned the U.S. federal tax system from a worldwide tax system to a territorial tax system. On December 22, 2017, the SEC issued Staff Accounting Bulletin 118 ("SAB 118") that provides additional guidance allowing companies to apply a measurement period of up to twelve months to account for the impacts of the Tax Act in their financial statements. As of December 31, 2018, the Company has finalized its accounting for the impacts of the Tax Act. During the year ended December 31, 2018, the Company recognized a \$0.2 million benefit related to the remeasurement of the Company's deferred tax assets and liabilities, as a result of filing the Company's 2017 U.S. tax return. This amount was included as a component of the Company's provision for income taxes and was fully offset by a corresponding amount in the Company's valuation allowance.

The components of the benefit (provision) for income taxes were as follows:

	Year Ended December 31,		
	2018	2017	2016
		(in thousands)	
Current benefit (provision) for income taxes:			
Singapore	\$ (4)	\$ 199	\$ —
Rest of world	(65)	(133)	(1,180)
Total current benefit (provision) for income taxes	\$(69)	\$ 66	\$(1,180)
Deferred benefit (provision) for income taxes:			
Singapore	\$—	\$(134)	\$ 134
Rest of world		(774)	564
Total deferred benefit (provision) for income taxes	\$—	\$(908)	\$ 698
Total benefit (provision) for income taxes	\$ (69)	\$(842)	\$ (482)

A reconciliation of the Singapore statutory income tax rate to the Company's effective income tax rate is as follows:

	Year	Year Ended December 31,	
	2018	2017	2016
Singapore statutory income tax rate	17.0%	17.0%	17.0%
Federal and state tax credits	6.6	5.7	3.1
Permanent differences	(0.3)	(2.6)	(0.9)
Changes in reserves for uncertain tax positions	(2.3)	(3.5)	(3.6)
Foreign rate differential	7.8	2.8	(0.1)
Tax rate change	(0.3)	(0.9)	—
Other	0.2	0.4	(0.7)
Change in deferred tax asset valuation allowance	(28.7)	(19.7)	(15.7)
Effective income tax rate	_	(0.8)%	(0.9)%

The components of the Company's deferred tax assets and liabilities as of December 31, 2018 and 2017 are as follows:

	Decem	December 31,	
	2018	2017	
	(in thou	isands)	
Deferred tax assets:			
Net operating loss carryforwards	\$ 58,661	\$ 28,913	
Federal and state tax credits	13,783	4,522	
Accrued expenses	4,276	1,903	
Share-based compensation	3,811	1,921	
Accumulated amortization	18,829		
Other	1,267	176	
Total deferred tax assets	100,627	37,435	
Valuation allowance	(99,438)	(36,069)	
Net deferred tax assets	1,189	1,366	
Deferred tax liabilities:			
Accumulated depreciation	(1,155)	(1,366)	
Other	(34)		
Total deferred tax liabilities	(1,189)	(1,366)	
Net deferred tax assets (liabilities)	\$ —	\$ —	

A roll-forward of the valuation allowance for the years ended December 31, 2018 and 2017 is as follows:

	Year Ended De	Year Ended December 31,	
	2018	2017	
	(in thousa	ands)	
Balance at beginning of year	\$ 36,069	\$ 15,999	
Increase in valuation allowance	63,337	20,595	
Reversal of valuation allowance		(598)	
Effect of foreign currency translation	32	73	
Balance at end of year	\$ 99,438	\$ 36,069	

As of December 31, 2018, the Company had federal net operating loss carryforwards in the United States of \$82.6 million, \$80.6 million of which may be available to offset future income tax liabilities indefinitely, while \$2.0 million of carryforwards that were in existence as of December 31, 2017 may offset future income tax liabilities up through 2037. As of December 31, 2018 and 2017, the Company has U.S. federal research and development tax credit carryforwards of approximately \$6.2 million and \$2.8 million, respectively, available to offset future U.S. federal income taxes. As of December 31, 2018 and 2017, the Company has state research and development tax credit carryforwards of approximately \$1.8 million and \$1.1 million, respectively, available to offset future state income taxes. The U.S. federal and state research and development tax credits will begin to expire in 2031. As of December 31, 2018, the Company had a U.S. orphan drug credit carryforward of \$5.0 million, which will begin to expire in 2037.

As of December 31, 2018 and 2017, the Company has net operating loss carryforwards in Japan of \$2.9 million and \$4.1 million, respectively, which may be available to offset future income tax liabilities and begin to expire in 2023.

As of December 31, 2018 and 2017, the Company has net operating loss carryforwards in Singapore of \$161.3 million and \$149.2 million, respectively, which may be available to offset future income tax liabilities and can be carried forward indefinitely.

As of December 31, 2018 and 2017, the Company has net operating loss carryforwards in the United Kingdom of \$46.4 million and \$10.5 million, which may be available to offset future income tax liabilities and can be carried forward indefinitely.

The Company has evaluated the positive and negative evidence bearing upon its ability to realize its deferred tax assets. As of December 31, 2018, management has considered the Company's history of cumulative net losses incurred since inception and its lack of commercialization of any products or generation of any revenue from product sales since inception and has concluded that it is more likely than not that the Company will not realize the benefits of the deferred tax assets in all jurisdictions. Accordingly, a full valuation allowance has been established against those deferred tax assets as of December 31, 2018.

The valuation allowance increased by approximately \$63.3 million in 2018, \$20.1 million in 2017 and \$8.5 million in 2016 primarily as a result of operating losses generated with no corresponding financial statement benefit. Additionally, as discussed in Note 2, the Company adopted ASU 2016-16 which resulted in an increase to the Company's deferred tax assets, which was offset by a valuation allowance. The Company may release this valuation allowance when management determines that it is more-likely-than-not that the deferred tax assets will be realized. Any release of valuation allowance will be recorded as a tax benefit either increasing net income or decreasing net loss.

The Company's reserves related to taxes and its accounting for uncertain tax positions are based on a determination of whether and how much of a tax benefit taken by the Company in its tax filings or positions is more-likely-than-not to be realized following resolution of any potential contingencies present related to the tax benefit.

A summary of activity in the Company's unrecognized tax benefits is as follows:

	2018	2017	2016
		(in thousands)	
Unrecognized tax benefit at the beginning of the year	\$ 6,207	\$2,343	\$ 1,280
Tax positions related to prior years	430	—	(1,066)
Tax positions related to the current year	3,582	3,864	2,129
Unrecognized tax benefit at the end of the year	\$10,219	\$6,207	\$ 2,343

As of December 31, 2018, 2017 and 2016, the total amount of gross unrecognized tax benefits, which excludes interest and penalties, was \$10.2 million, \$6.2 million and \$2.3 million, respectively. At December 31, 2018, \$5.8 million of the net unrecognized tax benefits would affect the Company's annual effective tax rate if recognized.

The Company does not expect to record any material reductions in the measurement of its unrecognized tax benefits within the next twelve months.

The Company's policy is to record interest and penalties related to uncertain tax positions as part of its income tax provision. As of December 31, 2018 and 2017, the Company had recorded less than \$0.1 million of interest or penalties related to uncertain tax positions.

The Company files income tax returns as prescribed by the tax laws of the jurisdictions in which it operates. In the normal course of business, the Company is subject to examination by various tax authorities in the United States, Japan, Singapore and the United Kingdom. There are currently no pending income tax examinations. Tax years from 2012 to the present are still open to examination in the United States, from 2008 to the present in Japan, from 2012 to the present in Singapore and from 2017 to the present in the United Kingdom. To the extent that the Company has tax attribute carryforwards, the tax years in which the attribute was generated may still be adjusted upon examination by the tax authorities to the extent utilized in a future period.

As of December 31, 2018 and 2017, \$53.0 million and \$48.8 million, respectively, of cash was held by the subsidiaries outside of Singapore. The Company does not provide for Singapore income tax or foreign withholding taxes on foreign unrepatriated earnings, as the Company intends to permanently reinvest undistributed earnings in its foreign subsidiaries. If the Company decides to change this assertion in the future to repatriate any additional foreign earnings, the Company may be required to accrue and pay taxes. Because of the complexity of Singapore and foreign tax rules applicable to the distribution of earnings from foreign subsidiaries to Singapore, the determination of the unrecognized deferred tax liability on these earnings is not practicable.

Utilization of the net operating loss carryforwards and research and development tax credit carryforwards in the United States may be subject to a substantial annual limitation under Section 382 of the Internal Revenue Code of 1986, as amended (the "Code"), due to ownership changes that have occurred previously or that could occur in the future. These ownership changes may limit the amount of carryforwards that can be utilized annually to offset future taxable income. In general, an ownership change, as defined by Section 382, results from transactions

increasing the ownership of certain shareholders or public groups in the shares of a corporation by more than 50% over a three-year period. In 2018, the Company completed a study to assess whether an ownership change has occurred or whether there have been multiple ownership changes since its formation. The results of this study indicated that the Company experienced ownership changes as defined by Section 382 of the Code. Based on the results of the study, management has determined that the limitations will not have a material impact on the Company's ability to utilize its net operating losses and research and development credit carryforwards to offset future tax liabilities. Should an ownership change have occurred after December 31, 2018 or occur in the future, the Company's ability to utilize its net operating losses and research and development tax credit carryforwards may be limited.

## **11. EMPLOYEE BENEFIT PLANS**

The Company has a 401(k) retirement and savings plan (the "401(k) Plan") covering employees of Wave USA. The 401(k) Plan allows employees to make contributions up to the maximum allowable amount set by the IRS. Under the 401(k) Plan, the Company may make discretionary contributions as approved by the board of directors. The Company made contributions of \$0.7 million and \$0.4 million in the years ended December 31, 2018 and 2017, respectively. The Company did not make contributions to the 401(k) Plan during the year ended December 31, 2016.

#### **12. RELATED PARTIES**

The Company had the following related party transactions for the periods presented in the accompanying consolidated financial statements, which have not otherwise been discussed in these notes to the consolidated financial statements:

- The Company held cash of \$0.1 million in depository accounts with Kagoshima Bank, Ltd., an affiliate of one of the Company's shareholders, Kagoshima Shinsangyo Sousei Investment Limited Partnership, as of December 31, 2017. These depository accounts were closed during the three months ended March 31, 2018.
- Pursuant to the terms of various service agreements with Shin Nippon Biomedical Laboratories Ltd., one of the Company's shareholders, and its affiliates (together "SNBL"), the Company paid SNBL \$1.3 million, \$0.5 million, and \$0.4 million for the nine months ended September 30, 2018 and the years ended December 31, 2017 and 2016, respectively, for contract research services provided to the Company and its affiliates. SNBL ceased providing contract research services to the Company and its affiliates as of October 1, 2018.
- In 2012, the Company entered into a consulting agreement for scientific services with Dr. Gregory L. Verdine, one of the Company's founders and a member of the Company's board of directors. The consulting agreement does not have a specific term and may be terminated by either party upon 14 days' prior written notice. Pursuant to the consulting agreement, the Company pays Dr. Verdine approximately \$13 thousand per month, plus reimbursement for certain expenses.

# 13. SELECTED QUARTERLY FINANCIAL INFORMATION (UNAUDITED)

Selected quarterly results from operations for the years ended December 31, 2018 and 2017 are as follows:

	2018 Quarter Ended			
	March 31	June 30 September 30		December 31
		(in thousands, except for per share data)		
Revenues	\$ 1,422	\$ 4,879	\$ 4,493	\$ 3,620
Operating expenses	37,197	41,452	42,725	52,563
Loss from operations	(35,775)	(36,573)	(38,232)	(48,943)
Net loss	(35,241)	(35,894)	(37,631)	(37,887)
Basic and diluted net loss per ordinary share	\$ (1.26)	\$ (1.23)	\$ (1.28)	\$ (1.29)

		2017 Quarter Ended			
	March 31	June 30	September 30	December 31	
		(in thousands, except for per share data)			
Revenues	\$ 383	\$ 1,097	\$ 1,315	\$ 1,098	
Operating expenses	20,590	25,770	27,668	32,256	
Loss from operations	(20,207)	(24,673)	(26,353)	(31,158)	
Net loss	(21,096)	(24,597)	(25,494)	(30,793)	
Basic and diluted net loss per ordinary share	\$ (0.90)	\$ (0.91)	\$ (0.92)	\$ (1.11)	

# 14. SUBSEQUENT EVENTS

On January 28, 2019, the Company 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, the Company 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 (collectively, the "January 2019 Offering"). The net proceeds to the Company from the January 2019 Offering are expected to be approximately \$161.6 million, after deducting underwriting discounts and commissions and estimated offering expenses.

# Supplementary Financial Information of Wave Life Sciences Ltd. (Parent Company)

# WAVE LIFE SCIENCES LTD. BALANCE SHEETS

(In thousands,	except shar	e amounts)	
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	Dee	ember 31, 2018	De	cember 31, 2017
Assets				
Current assets:				
Cash and cash equivalents	\$	121,853	\$	93,680
Accounts receivable		—		1,000
Intercompany accounts receivables		121		5,920
Prepaid expenses and other current assets		1,165		931
Total current assets		123,139		101,531
Long-term assets:				
Investment in subsidiary—Wave USA		—		42,713
Investment in subsidiary—Wave UK		—		10,736
Investment in subsidiary—Wave Japan		2,918		3,037
Total long-term assets		2,918		56,486
Total assets	\$	126,057	\$	158,017
Liabilities, Series A preferred shares and shareholders' equity				
Current liabilities:				
Accounts payable	\$	516	\$	248
Intercompany accounts payable		8,493		11,714
Accrued expenses and other current liabilities		392		492
Current portion of deferred revenue		6,802		2,705
Total current liabilities		16,203		15,159
Long-term liabilities:				
Deferred revenue, net of current portion		1,851		5,607
Total long-term liabilities		1,851		5,607
Total liabilities	\$	18,054	\$	20,766
Series A preferred shares, no par value; 3,901,348 shares issued and outstanding at December 31, 2018 and 2017	\$	7,874	\$	7,874
Shareholders' equity:				
Ordinary shares, no par value; 29,472,197 and 27,829,079 shares issued and outstanding at December 31,				
2018 and 2017, respectively		375,148		310,038
Additional paid-in capital		10,744		8,450
Accumulated deficit		(285,763)		(189,111)
Total shareholders' equity		100,129		129,377
Total liabilities, Series A preferred shares and shareholders' equity	\$	126,057	\$	158,017

The accompanying notes are an integral part of the supplementary financial information.

# Wave Life Sciences Ltd. Notes to Supplementary Financial Information

# **1. DOMICILE AND ACTIVITIES**

Wave Life Sciences Ltd. (the "Parent"), formerly Wave Life Sciences Pte. Ltd., registration number 201218209G, is a company incorporated in the Republic of Singapore on July 23, 2012. The Parent's registered office is located at 7 Straits View #12-00, Marina One East Tower, Singapore 018936. The Parent was incorporated with the purpose of combining two commonly held companies, Wave Life Sciences USA, Inc. ("Wave USA"), a Delaware corporation (formerly Ontorii, Inc.), and Wave Life Sciences (Japan) ("Wave Japan"), a company organized under the laws of Japan (formerly Chiralgen., Ltd.), which occurred on September 13, 2012. On May 31, 2016, Wave Life Sciences Ireland Limited ("Wave Ireland") was formed as a wholly-owned subsidiary of Wave Life Sciences Ltd. On April 3, 2017, Wave Life Sciences UK Limited ("Wave UK") was formed as a wholly-owned subsidiary of Wave Life Sciences Ltd.

On November 5, 2015, the Parent converted from a Singapore private company limited by shares to a Singapore public company limited by shares. In connection with this conversion, the Parent changed its name from "Wave Life Sciences Pte. Ltd." to "Wave Life Sciences Ltd."

Wave Life Sciences Ltd. (together with its subsidiaries, "Wave" or the "Company") is a clinical-stage genetic medicines company committed to delivering life-changing treatments for people battling devastating diseases. Using PRISM, Wave's proprietary discovery and drug development platform, enables Wave to target genetically defined diseases with stereopure oligonucleotides across multiple therapeutic modalities.

The Company's primary activities since inception have been developing PRISM to design, develop and commercialize oligonucleotide therapeutics, advancing the Company's neurology business, building the Company's research and development activities in ophthalmology and hepatic, advancing programs into the clinic, furthering clinical development of such clinical-stage programs, building the Company's intellectual property, and assuring adequate capital to support these activities.

# 2. SIGNIFICANT ACCOUNTING POLICIES

#### **Basis of preparation**

In order to comply with the requirements of the Singapore Companies Act, the Parent must present supplementary balance sheets comprised solely from the standalone accounts of Wave Life Sciences Ltd., the Parent company. This supplementary financial information is presented on page F-33.

The Parent applied to the Accounting and Corporate Regulatory Authority of Singapore ("ACRA") for an exemption from preparing its 2018 Singapore Statutory Financial Statements in accordance with Singapore Financial Reporting Standards. The Parent applied for this exemption because it is listed on the Nasdaq and therefore is required to prepare its audited annual consolidated financial statements in accordance with the Generally Accepted Accounting Principles of the United States ("U.S. GAAP") in order to maintain its listing on Nasdaq. These U.S. GAAP annual consolidated financial statements ("U.S. GAAP consolidated financials") were included in the Form 10-K, which was filed with the Securities and Exchange Commission ("SEC") on March 1, 2019. The Parent received the exemption from ACRA and therefore the Singapore Statutory Financial Statements were prepared in accordance with U.S. GAAP, except as noted in the paragraph entitled "Investment in Subsidiaries." The U.S. GAAP consolidated financials are included in these Singapore Statutory Financial Statements on pages F-1 to F-32.

# 2. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### Functional and presentation currency

This supplementary financial information is presented in U.S. dollars, which is the Parent's functional currency.

### Investment in Subsidiaries

For the purposes of the supplementary financial information provided as a part of the Singapore Statutory Financial Statements, the Parent did not consolidate its investments in subsidiaries and reported these investments as separate lines in the Parent's standalone balance sheet. The Parent's investment in each subsidiary is accounted for by either increasing its initial investment in each subsidiary by that subsidiary's net income for each financial year or by decreasing its initial investment in each subsidiaries net loss for each financial year to the extent of the initial investment of the subsidiary. U.S. GAAP requires that a Parent's investments in subsidiaries be consolidated.

#### **Cash Equivalents**

The Parent considers all highly liquid securities with original final maturities of three months or less from the date of purchase to be cash equivalents. Cash equivalents are comprised of funds in money market accounts.

# Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the supplementary financial information. Significant estimates and assumptions reflected in the supplementary financial information include the valuation of the Parent's ordinary shares prior to the initial public offering in November 2015, the assumptions used to determine the fair value of share-based awards, the Parent's revenue recognition policy, particularly, (a) assessing the number of performance obligations; (b) determining the transaction price; (c) allocating the transaction price to the performance obligations in the contract; and (d) determining the pattern over which performance obligations are satisfied, including estimates to complete performance obligations, and the valuation allowance required for the Parent's deferred tax assets and determining uncertain tax positions and the related liabilities. Estimates are periodically reviewed in light of changes in circumstances, facts and experience. Actual results could differ from the Parent's estimates.

#### Fair Value of Financial Instruments

The Parent is required to disclose information on all assets and liabilities reported at fair value that enables an assessment of the inputs used in determining the reported fair values. The fair value hierarchy is a hierarchy of inputs used in measuring fair value that maximizes the use of observable inputs and minimizes the use of unobservable inputs by requiring that the observable inputs be used when available. Observable inputs are inputs that market participants would use in pricing the financial instrument based on market data obtained from sources independent of the Parent. Unobservable inputs are inputs that reflect the Parent's assumptions about the inputs that market participants would use in pricing the financial instrument. The fair value hierarchy applies only to the valuation inputs used in determining the reported fair value of the investments and is not a measure of the investment credit quality. The hierarchy defines three levels of valuation inputs:

Level 1—Unadjusted quoted prices in active markets that are accessible at the measurement date of identical, unrestricted assets.

# 2. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Level 2—Quoted prices for similar assets, or inputs that are observable, either directly or indirectly, for substantially the full term through corroboration with observable market data. Level 2 includes investments valued at quoted prices adjusted for legal or contractual restrictions specific to the security.

Level 3—Pricing inputs are unobservable for the asset, that is, inputs that reflect the reporting entity's own assumptions about the assumptions market participants would use in pricing the asset. Level 3 includes private investments that are supported by little or no market activity.

Cash and cash equivalents are Level 1 assets which are comprised of funds held in checking and money market accounts. Cash and cash equivalents were recorded at fair value as of December 31, 2018 and 2017, totaling \$121.9 million and \$93.7 million, respectively. The carrying amounts of accounts payable and accrued expenses approximate their fair values due to their short-term maturities. Accounts receivable relate to the Parent's collaboration agreement.

Given their related party nature, intercompany accounts receivables and intercompany accounts payables were transacted based upon terms and amounts set forth between the Parent and its subsidiaries.

#### Concentration of Credit Risk

Cash and cash equivalents are financial instruments that potentially subject the Parent to concentration of credit risk. The Parent uses high quality, accredited financial institutions to maintain its cash and cash equivalents and, accordingly, such funds are subject to minimal credit risk. The Parent has not experienced any losses in such accounts and management believes that the Parent is not exposed to significant credit risk due to the financial position of the depository institutions in which those deposits are held. The Parent has no financial instruments with off-balance sheet risk of loss.

#### **Revenue Recognition**

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

#### Wave Life Sciences Ltd. Notes to Supplementary Financial Information Year ended December 31, 2018

# 2. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

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

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

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

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

*Research and development services*: If an arrangement is determined to contain a promise or obligation for the Parent to perform research and development services, the Parent must determine whether these services are distinct from other promises in the arrangement. In assessing whether the services are distinct from the other promises, the Parent considers the capabilities of the customer to perform these same services. In addition, the Parent considers whether the customer can benefit from a promise for its intended purpose without the receipt of

#### Wave Life Sciences Ltd. Notes to Supplementary Financial Information Year ended December 31, 2018

# 2. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

the remaining promise, whether the value of the promise is dependent on the unsatisfied promise, whether there are other vendors that could provide the remaining promise, and whether it is separately identifiable from the remaining promise. For research and development services that are combined with other promises, the Parent utilizes judgment to assess the nature of the combined performance obligation to determine whether the combined performance obligation is satisfied over time or at a point in time and, if over time, the appropriate method of measuring progress for purposes of recognizing revenue. The Parent evaluates the measure of progress each reporting period and, if necessary, adjusts the measure of performance and related revenue recognition.

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

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

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

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

For additional discussion of accounting for collaboration revenues, see Note 5.

# 2. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### **Product Revenue**

The Parent has had no product revenue to date.

### Share-Based Compensation

The Parent measures and recognizes share-based compensation expense, for both employee and director option awards, based on the grant date fair value of the awards. The Parent calculates the fair value of restricted share unit awards based on the grant date fair value of the underlying ordinary shares. The Parent recognizes share-based compensation expense on a straight-line basis over the requisite service period of the awards, which is generally the vesting period.

The Parent determines the fair value of share-based awards granted to non-employees as either the fair value of the consideration received or the fair value of the equity instruments issued, whichever is more reliably measurable. All equity instruments issued to non-employees as consideration for goods or services received by the Parent are accounted for based on the fair value of the equity instruments issued. These awards are recorded in expense and additional paid-in capital in shareholders' equity over the applicable service periods based on the fair value of the options at the end of each period. The Parent accounts for the expense from share-based awards to non-employees by re-measuring the awards at fair value over the vesting period.

The additional paid-in capital presented on the Parent's supplementary balance sheets only reflects share-based compensation expense for non-employee option awards and share-based compensation expense for option awards granted to non-employee directors, which are accounted for as employee option awards. The remainder of the consolidated share-based compensation expense was recorded by the Parent's subsidiaries as the expense relates to option awards and restricted share units granted to employees of the subsidiaries.

The fair value of each share option grant was determined using the methods and assumptions discussed below. These inputs are generally subjective and require significant judgment and estimation by management.

- *Fair Value of Ordinary Shares* The fair value of the ordinary shares underlying the Company's share-based awards is based on the closing price of the Parent's ordinary shares as reported by the Nasdaq Global Market on the date of grant.
- *Expected Term* The expected term of share options represents the weighted-average period that the share options are expected to remain outstanding. The Company estimated the expected term using the simplified method, which is an average of the contractual term of the option and the vesting period.
- *Expected Volatility* Since there is limited historical data for the Parent's ordinary shares and limited company-specific historical volatility, it has determined the share price volatility for options granted based on an analysis of the volatility used by a peer group of publicly traded companies. In evaluating similarity, the Parent considers factors such as industry, stage of life cycle and size.
- *Risk-free Interest Rate* The risk-free interest rate is based on the U.S. Treasury yield in effect at the time of the grant for zero-coupon U.S. Treasury notes with remaining terms similar to the expected term of the options.
- Dividend Rate The expected dividend was assumed to be zero as the Parent has never paid dividends and has no current plans to do so.

### 2. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### **Income Taxes**

The Parent accounts for income taxes using an asset and liability approach, which requires recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been recognized in the consolidated financial statements, but have not been reflected in taxable income. A valuation allowance is established to reduce deferred tax assets to their estimated realizable value. Therefore, the Parent provides a valuation allowance to the extent that it is more likely than not that all or a portion of the deferred tax assets will not be realized in the future.

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

The Parent recognizes interest and penalties related to uncertain tax positions in the income tax provision on the consolidated statements of operations and comprehensive loss.

The Parent has certain research and management services agreements in place with Wave USA, it's U.S. subsidiary, which include transfer pricing assumptions. The determination of the appropriate level of transfer pricing requires judgment based on transfer pricing analyses of comparable companies. The Parent monitors the nature of its service agreements for changes in its operations as well as economic conditions. The Parent also periodically reviews the transfer pricing analyses for changes in the composition in the pool of comparable companies as well the related ongoing results of the comparable companies.

# **Unasserted** Claims

In the ordinary course of business, the Parent may be subject to legal proceedings, claims and litigation as the Parent operates in an industry susceptible to patent and other legal claims. The Parent accounts for estimated losses with respect to legal proceedings and claims when such losses are probable and estimable. Legal costs associated with these matters are expensed when incurred. The Parent is not currently a party to any material legal proceedings.

# **3. INTERCOMPANY BALANCES**

The intercompany balances presented on the Parent's balance sheets are the result of intercompany transactions between the Parent and its subsidiaries.

As of December 31, 2018, intercompany accounts receivables totaled \$0.1 million and related to amounts due from Wave USA related to proceeds from the exercise of share options by Wave USA's employees as well as amounts due from Wave UK related to the reimbursement of certain expenses that were paid for by the Parent on behalf of Wave UK.

As of December 31, 2017, intercompany accounts receivable totaled \$5.9 million and related to amounts due from Wave USA related to certain expenses that were paid for on behalf of Wave USA by the Parent as well as

#### 3. INTERCOMPANY BALANCES (CONTINUED)

other amounts receivable from Wave USA related to proceeds from the exercise of share options by Wave USA's employees. The Parent issues options to purchase its shares to employees of its subsidiaries as a part of the compensation package.

As of December 31, 2018, the intercompany accounts payable totaled \$8.5 million and related to amounts due to Wave USA under the intercompany research and management services agreements as well as additional amounts due to Wave USA related to the reimbursement of certain expenses that were paid for by Wave USA on behalf of the Parent.

As of December 31, 2017, intercompany accounts payable totaled \$11.7 million and related to amounts payable to Wave USA and Wave Japan. The majority of the intercompany accounts payable related to amounts payable to Wave USA under the intercompany research and management services agreements. There were also intercompany amounts payable to Wave Japan related to the October 2017 transfer of intellectual property from Wave Japan to the Parent, as well as additional amounts payable to Wave USA and Wave Japan related to the reimbursement of certain expenses that were paid for by subsidiaries on behalf of the Parent.

# 4. INCOME TAXES

The components of the Parent's deferred tax assets and liabilities as of December 31, 2018 and 2017 are as follows:

	December 31, 2018	December 31, 2017
	(in thous	sands)
Deferred tax assets:		
Net operating loss carryforwards	\$ 27,787	\$ 25,893
Other	743	_
Total deferred tax assets	28,530	25,893
Valuation allowance	(28,530)	(25,776)
Net deferred tax assets		117
Deferred tax liability:		
Interest income		(117)
Total deferred tax liability		(117)
Net deferred tax asset (liability)	\$ —	\$ —

As of December 31, 2018, the Parent has net operating loss carryforwards in Singapore of \$161.3 million, which may be available to offset future income tax liabilities and can be carried forward indefinitely provided the Parent satisfies the shareholdings test for carry-forward losses.

The Parent has evaluated the positive and negative evidence bearing upon its ability to realize its deferred tax assets. Management has considered the Parent's history of cumulative net losses incurred since inception and its lack of commercialization of any products or generation of any revenue from product sales since inception and has concluded that it is more likely than not that the Parent will not realize the benefits of the deferred tax assets in Singapore. Accordingly, a full valuation allowance has been established against those deferred tax assets as of December 31, 2018. The valuation allowance increased by approximately \$2.8 million in 2018 primarily because

### 4. INCOME TAXES (CONTINUED)

of operating losses generated with no corresponding financial statement benefit. The Parent may release this valuation allowance when management determines that it is more likely than not that the deferred tax assets will be realized. Any release of valuation allowance will be recorded as a tax benefit increasing net income.

The Parent files income tax returns as prescribed by the tax laws of the jurisdictions in which it operates. In the normal course of business, the Parent is subject to examination by various taxing authorities in Singapore. There are currently no pending income tax examinations. Tax years from 2014 to the present are still open to examination in Singapore.

As of December 31, 2018 and 2017, \$53.0 million and \$48.8 million of cash and cash equivalents, respectively, was held by the Parent's subsidiaries outside of Singapore. Additionally, as of December 31, 2018 and 2017, the Parent's subsidiaries held restricted cash of \$3.6 million outside of Singapore. The Parent does not provide for Singapore income tax or foreign withholding taxes on foreign unrepatriated earnings, as the Parent intends to permanently reinvest undistributed earnings in its foreign subsidiaries. If the Parent decides to change this assertion in the future to repatriate any additional foreign earnings, the Parent may be required to accrue and pay taxes. Because of the complexity of Singapore and foreign tax rules applicable to the distribution of earnings from foreign subsidiaries to Singapore, the determination of the unrecognized deferred tax liability on these earnings is not practicable.

# 5. COLLABORATION AGREEMENTS

#### **Pfizer Collaboration and Equity Agreements**

In May 2016, the Parent entered into a Research, License and Option Agreement (as amended in November 2017, the "Pfizer Collaboration Agreement") with Pfizer Inc. ("Pfizer"). Pursuant to the terms of the Pfizer Collaboration Agreement, the Parent and Pfizer agreed to collaborate on the discovery, development and commercialization of stereopure oligonucleotide therapeutics for up to five programs (the "Pfizer Programs"), each directed at a genetically-defined hepatic target selected by Pfizer (the "Pfizer Collaboration"). The Parent received \$10.0 million as an upfront license fee under the Pfizer Collaboration Agreement. Subject to option exercises by Pfizer, the Parent may earn potential research, development and commercial milestone payments, plus royalties, tiered up to low double-digits, on sales of any products that may result from the Pfizer Collaboration. None of the payments under the Pfizer Collaboration Agreement are refundable.

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

Under the Pfizer Collaboration Agreement, the parties agreed to collaborate during a four-year research term. During the research term, the Parent is responsible to use its commercially reasonable efforts to advance up to five programs through to the selection of clinical candidates. At that stage, Pfizer may elect to license any of these Pfizer Programs exclusively and obtain exclusive rights to undertake the clinical development of the resulting clinical candidates into products and the potential commercialization of any such products thereafter. In addition, the Parent received a non-exclusive, royalty-bearing sublicensable license to use Pfizer's hepatic targeting technology in any of the Company's own hepatic programs that are outside the scope of the Pfizer

# 5. COLLABORATION AGREEMENTS (CONTINUED)

Collaboration (the "Wave Programs"). If the Company uses this technology on the Wave Programs, Pfizer is eligible to receive potential development and commercial milestone payments from the Company. Pfizer is also eligible to receive tiered royalties on sales of any products that include Pfizer's hepatic targeting technology.

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

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

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

The Parent assessed this arrangement in accordance with ASC 606 and concluded that the contract counterparty, Pfizer, is a customer. The Parent identified the following promises under the arrangement: (1) the non-exclusive, royalty-free research and development license; (2) the research and development services for Programs 1 and 2; (3) the program nomination options for Programs 3, 4 and 5; (4) the research and development services associated with Programs 3, 4 and 5; (5) the options to obtain a license to develop, manufacture and commercialize Programs 1 and 2; and (6) the options to obtain a license to develop, manufacture and commercialize Programs 1 and 2; and (6) the options to obtain a license to development license and should be combined into a single performance obligation for each program. The promises under the Pfizer Collaboration Agreement relate primarily to the research and development required by the Parent for each of the programs nominated by Pfizer.

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

### 5. COLLABORATION AGREEMENTS (CONTINUED)

Program 3; (4) material right provided for the option to nominate Program 4; and (5) material right provided for the option to nominate Program 5.

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

During the year ended December 31, 2017, it became probable that a significant reversal of cumulative revenue would not occur for a developmental milestone under the Pfizer Collaboration Agreement. At such time, the associated consideration was added to the estimated transaction price and allocated to the existing performance obligations, and the Parent recognized a cumulative catch-up to revenue for this developmental milestone, representing the amount that would have been recognized had the milestone payment been included in the transaction price from the outset of the arrangement. The remainder will be recognized in the same manner as the remaining, unrecognized transaction price over the remaining period until each performance obligation is satisfied.

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

Pfizer nominated the third, fourth and fifth hepatic targets in August 2016, March 2018 and April 2018, respectively. Upon each exercise, the Parent allocated the transaction price amount allocated to the material right at inception of the arrangement plus the program nomination option exercise fee paid by Pfizer at the time of exercising the option to a new performance obligation, which will be recognized as revenue as the research and development services are provided using the same method as the performance obligations relating to Programs 1 and 2.

Through December 31, 2018, the Parent had recognized revenue of \$9.9 million as collaboration revenue in the Company's consolidated statements of operations and comprehensive loss under the Pfizer Collaboration Agreement. During the years ended December 31, 2018, 2017 and 2016, the Parent recognized revenue of \$4.9 million, \$3.9 million and \$1.1 million, respectively, under the Pfizer Collaboration Agreement. The aggregate amount of the transaction price allocated to the Parent's partially unsatisfied performance obligations and recorded in deferred revenue at December 31, 2018 is \$8.7 million, of which \$6.8 million is included in

### 5. COLLABORATION AGREEMENTS (CONTINUED)

current liabilities. The Parent expects to recognize the remaining deferred revenue according to FTE hours incurred, over the remaining research term, which is 16 months as of December 31, 2018.

### Takeda Collaboration and Equity Agreements

In February 2018, Wave USA and Wave UK entered into a global strategic collaboration (the "Takeda Collaboration") with Takeda Pharmaceutical Company Limited ("Takeda"), pursuant to which Wave USA, Wave UK and Takeda agreed to collaborate on the research, development and commercialization of oligonucleotide therapeutics for disorders of the Central Nervous System ("CNS").

Simultaneously with Wave USA and Wave UK's entry into the collaboration and license agreement with Takeda (the "Takeda Collaboration Agreement"), the Parent entered into a share purchase agreement with Takeda (the "Takeda Equity Agreement," and together with the Takeda Collaboration Agreement, the "Takeda Agreements") pursuant to which the Parent agreed to sell to Takeda 1,096,892 of its ordinary shares at a purchase price of \$54.70 per share. In April 2018, the Parent closed the Takeda Equity Agreement and received aggregate cash proceeds of \$60.0 million. The Parent did not incur any material costs in connection with the issuance of shares.

# 6. SHARE CAPITAL

The following represents the historical ordinary share transactions of the Parent from December 31, 2015 through December 31, 2018:

- In May 2016, the Parent granted 1,875,000 ordinary shares to Pfizer under the Pfizer Agreements at a purchase price of \$16.00 per share, for an aggregate purchase price of \$30.0 million.
- In April 2017, the Parent closed a follow-on underwritten public offering of 4,166,667 ordinary shares at a purchase price of \$24.00 per share for gross proceeds of \$100.0 million. The net proceeds from this issuance were \$93.5 million after deducting underwriting discounts and commissions and other offering expenses.
- In April 2018, the Parent granted 1,096,892 ordinary shares to Takeda under the Takeda Collaboration Agreement at a purchase price of \$54.70 per share, for an aggregate purchase price of \$60.0 million.

#### Features of the Series A Preferred Shares and Ordinary Shares

The Series A preferred shares and ordinary shares have no par value and there is no concept of authorized share capital under Singapore law. The Series A preferred shares are not redeemable.

#### Voting

The holders of Series A preferred shares are not entitled to vote on any of the matters proposed to shareholders, other than as specified in the Parent's Constitution. The holders of ordinary shares are entitled to one vote for each ordinary share held at all meetings of shareholders and written actions in lieu of meetings.

#### Dividends

All dividends, if any, shall be declared and paid pro rata according to the number of shares held by each member entitled to receive dividends. The Parent's board of directors may deduct from any dividend all sums of money presently payable by the member to the Parent on account of calls.



#### 6. SHARE CAPITAL (CONTINUED)

#### Liquidation

In the event of a liquidation, dissolution or winding up of, or a return of capital by the Parent, the ordinary shares will rank equally with the Series A preferred shares after the payment of the liquidation preference of an aggregate of approximately \$10 thousand for Series A preferred shares.

# 7. SHARE-BASED COMPENSATION

In December 2014, the Parent's board of directors adopted the Wave Life Sciences Ltd. 2014 Equity Incentive Plan (the "2014 Plan"), and reserved 1,763,714 ordinary shares for issuance under this plan, which was increased to 5,064,544 in 2015, to 6,064,544 in 2017 and to 6,943,344 in 2018. The 2014 Plan authorizes the board of directors or a committee of the board to grant incentive share options, non-qualified share options, share appreciation rights, restricted awards, which include restricted shares and restricted share units ("RSUs"), and performance awards to eligible employees, consultants and directors of the Company.

As of December 31, 2018, 1,545,151 ordinary shares remained available for future grant under the 2014 Plan.

Share option activity under the 2014 Plan is summarized as follows:

	Number of Shares	Weighted- Average Exercise Price	Weighted- Average Remaining Contractual Term (in years)	Intr	ggregate insic Value ousands)(1)
Outstanding as of January 1, 2018	3,767,130	\$ 12.69			
Granted(2)	830,420	44.77			
Exercised	(507,632)	10.07			
Forfeited or cancelled	(73,328)	19.93			
Outstanding as of December 31, 2018	4,016,590	\$ 19.47	7.24	\$	93,520
Options exercisable as of December 31, 2018	2,451,584	\$ 10.11	6.51	\$	78,280
Options unvested as of December 31, 2018	1,565,006	\$ 34.14	8.39	\$	15,240

(1) The aggregate intrinsic value of options is calculated as the difference between the exercise price of the share options and the fair value of the Parent's ordinary shares for those share options that had exercise prices lower than the fair value of the ordinary shares as of the end of the period.

(2) Includes 54,000 options granted by the Parent to non-employee directors during 2018; these options are treated as options granted to employees.

Options generally vest over periods of one to four years, and options that are forfeited or cancelled are available to be granted again. The contractual life of options is generally five or ten years from the grant date.

# 7. SHARE-BASED COMPENSATION (CONTINUED)

The assumptions used in the Black-Scholes option pricing model to determine the fair value of share options granted to employees during the period were as follows:

	For	the Year Ended December 31,	
	2018	2017	2016
Risk-free interest rate	2.49% - 3.01%	1.49% - 2.23%	1.15% - 2.18%
Expected term (in years)	3.00 - 6.25	3.00 - 6.25	3.00 - 6.25
Expected volatility	64.17% - 70.90%	68.95% - 72.24%	60.89% - 68.76%
Expected dividend yield	0%	0%	0%

There were no options granted to non-employees in 2018, 2017 or 2016. The options that were granted to non-employees in 2015 were fully vested as of December 31, 2018.

RSU activity for the year ended December 31, 2018 is summarized as follows:

	RSUs	Average Grant Date Fair Value (in dollars per share)
Outstanding as of January 1, 2018	154,459	29.05
Granted	313,747	40.17
Vested	(38,594)	26.30
Forfeited	(21,091)	37.27
RSUs Outstanding at December 31, 2018	408,521	\$ 37.16

RSUs generally vest over periods of one to four years. RSUs that are forfeited are available to be granted again.

As of December 31, 2018, the unrecognized compensation cost related to outstanding options was \$29.0 million for employees. Of the total unrecognized compensation cost, \$1.1 million related to the Parent's options granted to non-employee directors and the remaining \$27.9 million related to the options granted to employees of the Parent's subsidiaries. The unrecognized compensation cost related to outstanding options for employees is expected to be recognized over a weighted-average period of approximately 2.8 years. For the years ended December 31, 2018, 2017 and 2016, the weighted-average grant date fair value per granted option was \$27.90, \$16.58 and \$30.23, respectively. The aggregate fair value of options that vested during the years ended December 31, 2018, 2017 and 2016, was \$9.3 million, \$11.5 million and \$4.7 million, respectively. The unrecognized over a weighted-average period of approximately 2.8 years ended December 31, 2018 and 2017 was \$1.8 million and \$0.4 million, respectively. No RSUs vested during the year ended December 31, 2018 and 2017 was \$1.8 million and \$0.4 million, respectively. No RSUs vested during the year ended December 31, 2016.

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# 7. SHARE-BASED COMPENSATION (CONTINUED)

Share-based compensation expense for the years ended December 31, 2018, 2017 and 2016 is classified as operating expenses in the consolidated statements of operations and comprehensive loss as follows:

	For the	For the Year Ended December 31,		
	2018	2017	2016	
		(in thousands)		
Research and development expenses	\$ 9,172	\$ 7,670	\$ 4,936	
General and administrative expenses	6,424	4,473	1,911	
Total share-based compensation expense	\$15,596	\$12,143	\$ 6,847	

Of the total share-based compensation expense recorded for the years ended December 31, 2018, 2017 and 2016, \$1.4 million, \$2.9 million and \$2.7 million, respectively, related to options granted to non-employees, all of which is included in research and development expenses on the consolidated statements of operations and comprehensive loss. Of the total share-based compensation expense recorded, the Parent recorded share-based compensation expense of \$2.3 million, \$4.0 million and \$2.8 million for the years ended December 31, 2018, 2017 and 2016, respectively. The Parent records the share-based compensation expense related to options granted to non-employees and non-employee directors. The options granted to non-employees directors are treated as options granted to employees. The Parent's subsidiaries record share-based compensation expense related to options and RSUs granted to employees of the subsidiaries, as well as shares issued to employees of the subsidiaries.

# 8. RELATED PARTIES

The Parent had the following related party transaction for the periods presented in the accompanying supplementary financial information, which has not otherwise been discussed in these notes to the supplementary financial information:

• The Parent held cash of \$0.1 million in depository accounts with Kagoshima Bank, Ltd., an affiliate of one of the Parent's shareholders, Kagoshima Shinsangyo Sousei Investment Limited Partnership, as of December 31, 2017. These depository accounts were closed during the three months ended March 31, 2018.

#### 9. SUBSEQUENT EVENTS

On January 28, 2019, the Parent 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, the Parent 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 (collectively, the "January 2019 Offering"). The net proceeds to the Parent from the January 2019 Offering were \$161.8 million, after deducting underwriting discounts and commissions and offering expenses.

# WAVE LIFE SCIENCES LTD.

#### 2019 EMPLOYEE SHARE PURCHASE PLAN

The following constitute the provisions of the 2019 Employee Share Purchase Plan (the "Plan") of Wave Life Sciences Ltd. (the "Company").

1. <u>Purpose</u>. The purpose of the Plan is to provide Employees of the Company and its Designated Subsidiaries with an opportunity to purchase Ordinary Shares in the capital of the Company. It is the intention of the Company to have the Plan qualify as an "Employee Stock Purchase Plan" under Section 423 of the Code. The provisions of the Plan shall, accordingly, be construed so as to extend and limit participation in a manner consistent with the requirements of that section of the Code.

# 2. Definitions.

(a) "Board" shall mean the Board of Directors of the Company as constituted at any time, or a committee of the Board named by the Board to administer the Plan.

(b) "Code" shall mean the Internal Revenue Code of 1986, as amended.

(c) "Company" shall mean Wave Life Sciences Ltd. a corporation formed in Singapore, and any successor thereto.

(d) "<u>Compensation</u>" shall mean regular rate of salary or wages plus overtime, shift premium and commissions that is taxable ordinary income for federal income tax purposes received by the Employee from the Company or a Designated Subsidiary, but excluding bonuses or other similar compensation, relocation, expense reimbursements, tuition or other reimbursements and income realized as a result of participation in any share option, share purchase or similar plan of the Company or a Designated Subsidiary.

(e) "<u>Continuous Status as an Employee</u>" shall mean the absence of any interruption or termination of service as an Employee. Continuous Status as an Employee shall not be considered interrupted in the case of a leave of absence agreed to in writing by the Company, provided that such leave is for a period of not more than 90 days or reemployment upon the expiration of such leave is guaranteed by contract or statute.

(f) "<u>Contributions</u>" shall mean all amounts credited to the account of a participant pursuant to the Plan.

(g) "Designated Subsidiaries" shall mean the Subsidiaries which have been designated by the Board from time to time in its sole discretion as eligible to participate in the Plan.

(h) "<u>Employee</u>" shall mean any person who is employed by the Company or one of its Designated Subsidiaries for tax purposes and who is customarily employed for at least 20 hours per week and more than five months in a calendar year by the Company or one of its Designated Subsidiaries.

(i) "Exercise Date" shall mean the last business day of each Offering Period of the Plan.

(j) "<u>Exercise Price</u>" shall mean with respect to an Offering Period, an amount equal to 85% of the Fair Market Value of an Ordinary Share on the Offering Date or on the Exercise Date, whichever is lower.

(k) "<u>Fair Market Value</u>" shall mean on a given date (i) if the Ordinary Shares are listed on a national securities exchange or traded in the over-the-counter market and sales prices are regularly reported for the Ordinary Shares, the closing or last sale price of the Ordinary Shares for such date (or, in the event that the Ordinary Shares are not traded on such date, on the immediately preceding trading date), on the composite tape or other comparable

reporting system; or (ii) if the Ordinary Shares are not listed on a national securities exchange and such price is not regularly reported, the mean between the bid and asked prices per share at the close of trading in the over-the-counter market.

(1) "Offering Date" shall mean the first business day of each Offering Period of the Plan.

(m) "Offering Period" shall mean a period of six months as set forth in paragraph 4 of the Plan.

(n) "<u>Ordinary Shares</u>" shall mean ordinary shares in the capital of the Company, or such other securities of the Company as may be designated by the Committee from time to time in substitution thereof.

(o) "Plan" shall mean this Wave Life Sciences Ltd. 2019 Employee Share Purchase Plan.

(p) "<u>Subsidiary</u>" shall mean a corporation, domestic or foreign, of which not less than 50% of the voting shares are held by the Company or a Subsidiary, whether or not such corporation now exists or is hereafter organized or acquired by the Company or a Subsidiary.

#### 3. Eligibility.

(a) Any person who has been continuously employed as an Employee for three months as of the Offering Date of a given Offering Period shall be eligible to participate in such Offering Period under the Plan and further, subject to the requirements of paragraph 5(a) and the limitations imposed by Section 423(b) of the Code. All Employees granted options under the Plan with respect to any Offering Period will have the same rights and privileges except for any differences that may be permitted pursuant to Section 423.

(b) Any provisions of the Plan to the contrary notwithstanding, no Employee shall be granted an option under the Plan (i) if, immediately after the grant, such Employee (or any other person whose shares would be attributed to such Employee pursuant to Section 424(d) of the Code) would own shares and/or hold outstanding options to purchase shares possessing five percent (5%) or more of the total combined voting power or value of all classes of share capital of the Company or of any Subsidiary of the Company, (ii) which permits his or her rights to purchase shares under all employee share purchase plans (described in Section 423 of the Code) of the Company and its Subsidiaries to accrue at a rate which exceeds \$25,000 of Fair Market Value, determined at the time such option is granted, for each calendar year in which such option is outstanding at any time. In addition, the maximum number of Shares that may be purchased by any participant during an Offering Period shall equal \$25,000 divided by the Fair Market Value of the Ordinary Shares on the first trading day of such Offering Period, which price shall be adjusted if the price per share is adjusted pursuant to paragraph 17. Any option granted under the Plan shall be deemed to be modified to the extent necessary to satisfy this paragraph 3(b).

4. <u>Offering Periods</u>. The Plan shall be implemented by a series of Offering Periods, with a new Offering Period commencing on January 15th and July 15th of each year or the first business day thereafter (or at such other time or times as may be determined by the Board). The initial Offering Period shall commence on January 15, 2020 and shall end on July 15, 2020 (the "Initial Offering Period").

# 5. Participation.

(a) An eligible Employee may become a participant in the Plan by completing an Enrollment Form provided by the Company and filing it with the Company or its designee at least 15 days prior to the applicable Offering Date, unless a later time for filing the Enrollment Form is set by the Board for all eligible Employees with respect to a given Offering Period. The Enrollment Form and its submission may be electronic as directed by the Company. The Enrollment Form shall set forth the percentage of the participant's Compensation (which shall be not less than 1% and not more than 15%) to be paid as Contributions pursuant to the Plan.

(b) Payroll deductions shall commence with the first payroll following the Offering Date, unless a later time is set by the Board with respect to a given Offering Period and shall end on the last payroll paid on or prior to the Exercise Date of the Offering Period to which the Enrollment Form is applicable, unless sooner terminated as provided in paragraph 10.

#### 6. Method of Payment of Contributions.

(a) Each participant shall elect to have payroll deductions made on each payroll during the Offering Period in an amount not less than 1% and not more than 15% of such participant's Compensation on each such payroll; provided that the aggregate of such payroll deductions during the Offering Period shall not exceed 15% of the participant's aggregate Compensation during said Offering Period (or such other percentage as the Board may establish from time to time before an Offering Date). All payroll deductions made by a participant shall be credited to his or her account under the Plan. A participant may not make any additional payments into such account.

(b) A participant may discontinue his or her participation in the Plan as provided in paragraph 10, or, on one occasion only during the Offering Period, may decrease, but may not increase, the rate of his or her Contributions during the Offering Period by completing and filing with the Company a new Enrollment Form authorizing a change in the deduction rate. The change in rate shall be effective as of the beginning of the next payroll period following the date of filing of the new Enrollment Form, if the Enrollment Form is completed at least ten business days prior to such date, and, if not, as of the beginning of the next succeeding payroll period.

(c) Notwithstanding the foregoing, to the extent necessary to comply with Section 423(b)(8) of the Code and paragraph 3(b), a participant's payroll deductions may be decreased to 0% at such time during any Offering Period which is scheduled to end during the current calendar year that the aggregate of all payroll deductions accumulated with respect to such Offering Period and any other Offering Period ending within the same calendar year equals \$21,250. Payroll deductions shall recommence at the rate provided in such participant's Enrollment Form at the beginning of the first Offering Period which is scheduled to end in the following calendar year, unless terminated by the participant as provided in paragraph 10.

7. <u>Grant of Option</u>. On the Offering Date of each Offering Period, each eligible Employee participating in such Offering Period shall be granted an option to purchase on the Exercise Date of such Offering Period a number of Ordinary Shares determined by dividing such Employee's Contributions accumulated prior to such Exercise Date and retained in the participant's account as of the Exercise Date by the applicable Exercise Price; provided however, that such purchase shall be subject to the limitations set forth in paragraphs 3(b) and 12.

8. <u>Exercise of Option</u>. Unless a participant withdraws from the Plan as provided in paragraph 10, his or her option for the purchase of Shares will be exercised automatically on the Exercise Date of the Offering Period, and the maximum number of full Shares subject to the option will be purchased for him or her at the applicable Exercise Price with the accumulated Contributions in his or her account. If a fractional number of shares results, then such number shall be rounded down to the next whole number and any unapplied cash shall be carried forward to the next Exercise Date, unless the participant requests a cash payment. The Shares purchased upon exercise of an option hereunder shall be deemed to be transferred to the participant on the Exercise Date. During a participant's lifetime, a participant's option to purchase Shares hereunder is exercisable only by him or her.

9. <u>Delivery</u>. Shares shall be held for each participant's benefit by a broker designated by the Company. Any payroll deductions accumulated in a participant's account which are not sufficient to purchase a full Share shall be retained in the participant's account for the subsequent Offering Period, subject to earlier withdrawal by the participant as provided in paragraph 10 below. Any other amounts left over in a participant's account after an Exercise Date shall be returned to the participant.

# 10. <u>Withdrawal; Termination of Employment</u>.

(a) A participant may withdraw all but not less than all the Contributions credited to his or her account under the Plan by giving written notice to the Company or its designee at any time at least five business days prior to the Exercise Date of the Offering Period. All of the participant's Contributions credited to his or her account will be paid to him or her promptly after receipt of his or her notice of withdrawal and his or her option for the current period will be automatically terminated, and no further Contributions for the purchase of Shares will be made during the Offering Period.

(b) Upon termination of the participant's Continuous Status as an Employee prior to the Exercise Date of the Offering Period for any reason, including retirement or death, the Contributions credited to his or her account will be returned to him or her or, in the case of his or her death, to the person or persons entitled thereto under paragraph 14, and his or her option will be automatically terminated.

(c) In the event an Employee fails to remain in Continuous Status as an Employee for at least 20 hours per week during the Offering Period in which the Employee is a participant, he or she will be deemed to have elected to withdraw from the Plan and the Contributions credited to his or her account will be returned to him or her and his or her option terminated.

(d) A participant's withdrawal from an Offering Period will not have any effect upon his or her eligibility to participate in a succeeding offering or in any similar plan which may hereafter be adopted by the Company.

11. <u>Interest</u>. No interest shall accrue on the Contributions of a participant in the Plan.

#### 12. Shares.

(a) The maximum number of Ordinary Shares which shall be made available for sale under the Plan shall be 1,000,000 Shares, subject to adjustment upon changes in capitalization of the Company as provided in paragraph 17, provided that no more than 500 shares may be purchased by any participant in any one Offering Period unless such amount is changed by the Board at any time prior to the end of an Offering Period. If the total number of Shares which would otherwise be subject to options granted pursuant to paragraph 7 on the Offering Date of an Offering Period exceeds the number of Shares then available under the Plan (after deduction of all Shares for which options have been exercised), the Company shall make a pro rata allocation of the Shares remaining available for option grants in as uniform a manner as shall be practicable and as it shall determine to be equitable. Any amounts remaining in an Employee's account not applied to the purchase of Shares pursuant to this paragraph 12 shall be refunded on or promptly after the Exercise Date. In such event, the Company shall give written notice of such reduction of the number of Shares subject to the option to each Employee affected thereby and shall similarly reduce the rate of Contributions, if necessary.

(b) The participant will have no interest or voting right in Shares covered by his or her option until such option has been exercised.

13. <u>Administration</u>. The Board shall supervise and administer the Plan and shall have full power to adopt, amend and rescind any rules deemed desirable and appropriate for the administration of the Plan and not inconsistent with the Plan, to construe and interpret the Plan, and to make all other determinations necessary or advisable for the administration of the Plan.

#### 14. Designation of Beneficiary.

(a) A participant may designate a beneficiary who is to receive any Shares and cash, if any, from the participant's account under the Plan in the event of such participant's death subsequent to the end of the Offering Period but prior to delivery to him or her of such Shares and cash. In addition, a participant may designate a beneficiary who

is to receive any cash from the participant's account under the Plan in the event of such participant's death prior to the Exercise Date of the Offering Period. If a participant is married and the designated beneficiary is not the spouse, spousal consent shall be required for such designation to be effective. Beneficiary designations shall be made either in writing or by electronic delivery as directed by the Company.

(b) Such designation of beneficiary may be changed by the participant (and his or her spouse, if any) at any time by submission of the required notice, which may be electronic. In the event of the death of a participant and in the absence of a beneficiary validly designated under the Plan who is living at the time of such participant's death, the Company shall deliver such Shares and/or cash to the executor or administrator of the estate of the participant, or if no such executor or administrator has been appointed (to the knowledge of the Company), the Company, in its discretion, may deliver such Shares and/or cash to the spouse or to any one or more dependents or relatives of the participant, or if no spouse, dependent or relative is known to the Company, then to such other person as the Company may designate.

15. <u>Transferability</u>. Neither Contributions credited to a participant's account nor any rights with regard to the exercise of an option or to receive Shares under the Plan may be assigned, transferred, pledged or otherwise disposed of in any way (other than by will, the laws of descent and distribution or as provided in paragraph 14) by the participant. Any such attempt at assignment, transfer, pledge or other disposition shall be without effect, except that the Company may treat such act as an election to withdraw funds in accordance with paragraph 10.

16. <u>Use of Funds</u>. All Contributions received or held by the Company under the Plan may be used by the Company for any corporate purpose, and the Company shall not be obligated to segregate such Contributions.

#### 17. Adjustments Upon Changes in Capitalization.

(a) Subject to any required action by the shareholders of the Company, the number of Ordinary Shares covered by unexercised options under the Plan and the number of Ordinary Shares which have been authorized for issuance under the Plan but are not yet subject to options under paragraph 12(a) (the "Reserve"), as well as the price per share covered by each unexercised option under the Plan, shall be proportionately adjusted for any increase or decrease in the number of issued Ordinary Shares resulting from a share split, reverse share split, share dividend, combination or reclassification of the Ordinary Shares. Such adjustment shall be made by the Board, whose determination in that respect shall be final, binding and conclusive.

(b) In the event of the proposed dissolution or liquidation of the Company, an Offering Period then in progress will terminate immediately prior to the consummation of such proposed action, unless otherwise provided by the Board. In the event of a proposed sale of all or substantially all of the assets of the Company, or the merger, consolidation or other capital reorganization of the Company with or into another corporation, each option outstanding under the Plan shall be assumed or an equivalent option shall be substituted by such successor corporation or a parent or subsidiary of such successor corporation, unless the Board determines, in the exercise of its sole discretion and in lieu of such assumption or substitution, to shorten the Offering Period then in progress by setting a new Exercise Date (the "New Exercise Date"). If the Board shortens the Offering Period then in progress in lieu of assumption or substitution in the event of a merger or sale of assets, the Board shall notify each participant in writing, at least ten days prior to the New Exercise Date, that the Exercise Date for his or her option has been changed to the New Exercise Date and that his or her option will be exercised automatically on the New Exercise Date, unless prior to such date he or she has withdrawn from the Offering Period as provided in paragraph 10. For purposes of this paragraph, an option granted under the Plan shall be deemed to be assumed if, following the sale of assets, merger or other reorganization, the option confers the right to purchase, for each Ordinary Share subject to the option immediately prior to the sale of assets, merger or other reorganization, the consideration (whether stock, cash or other securities or property) received in the sale of assets, merger or other reorganization by holders of Ordinary Share held on the effective date of such transaction (and if such holders were offered a choice of consideration chosen by the holders of a majority of the outstanding Ordinary Shares); provided, however, th

such consideration received in such transaction was not solely common stock of the successor corporation or its parent (as defined in Section 424(e) of the Code), the Board may, with the consent of the successor corporation, provide for the consideration to be received upon exercise of the option to be solely common stock of the successor corporation or its parent equal in fair market value to the per share consideration received by holders of Ordinary Shares in the sale of assets, merger or other reorganization.

(c) The Board may, if it so determines in the exercise of its sole discretion, also make provision for adjusting the Reserve, as well as the price per share covered by each outstanding option, in the event that the Company effects one or more reorganizations, recapitalizations, rights offerings or other increases or reductions of its outstanding Ordinary Shares, and in the event of the Company being consolidated with or merged into any other corporation.

#### 18. Amendment or Termination.

(a) The Board may at any time terminate or amend the Plan. Except as provided in paragraph 17, no such termination may affect options previously granted, nor may an amendment make any change in any option theretofore granted which adversely affects the rights of any participant provided that an Offering Period may be terminated by the Board on an Exercise Date or by the Board's setting a new Exercise Date with respect to an Offering Period then in progress if the Board determines that termination of the Offering Period is in the best interests of the Company and the shareholders or if continuation of the Offering Period would cause the Company to incur adverse accounting charges in the generally-accepted accounting rules applicable to the Plan. In addition, to the extent necessary to comply with Section 423 of the Code (or any successor rule or provision or any applicable law or regulation), the Company shall obtain shareholder approval in such a manner and to such a degree as so required.

(b) Without shareholder consent and without regard to whether any participant rights may be considered to have been adversely affected, the Board shall be entitled to change the Offering Periods, limit the frequency and/or number of changes in the amount withheld during an Offering Period, establish the exchange ratio applicable to amounts withheld in a currency other than U.S. dollars, permit payroll withholding in excess of the amount designated by a participant in order to adjust for delays or mistakes in the Company's processing of properly completed withholding elections, establish reasonable waiting and adjustment periods and/or accounting and crediting procedures to ensure that amounts applied toward the purchase of Ordinary Shares for each participant properly correspond with amounts withheld from the participant's Compensation, and establish such other limitations or procedures as the Board determines in its sole discretion advisable that are consistent with the Plan.

19. <u>Notices</u>. All notices or other communications by a participant to the Company under or in connection with the Plan shall be deemed to have been duly given when received in the form specified by the Company at the location, or by the person, designated by the Company for the receipt thereof.

20. <u>Conditions Upon Issuance of Shares</u>. Shares shall not be issued with respect to an option unless the exercise of such option and the issuance and delivery of such Shares pursuant thereto shall comply with all applicable provisions of law, domestic or foreign, including, without limitation, the Securities Act of 1933, as amended, the Securities Exchange Act of 1934, as amended, the rules and regulations promulgated thereunder, and the requirements of any share exchange upon which the Ordinary Shares may then be listed, and shall be further subject to the approval of counsel for the Company with respect to such compliance.

21. <u>Information Regarding Disqualifying Dispositions</u>. By electing to participate in the Plan, each participant agrees to provide any information about any transfer of Shares acquired under the Plan that occurs within two years after the first business day of the Offering Period in which such Shares were acquired as may be requested by the Company or any Subsidiaries in order to assist it in complying with the tax laws.

22. <u>Right to Terminate Employment</u>. Nothing in the Plan or in any agreement entered into pursuant to the Plan shall confer upon any Employee the right to continue in the employment of the Company or any Subsidiary or affect any right which the Company or any Subsidiary may have to terminate the employment of such Employee.

23. <u>Rights as a Shareholder</u>. Neither the granting of an option nor a deduction from payroll shall constitute an Employee the owner of Shares covered by an option. No Employee shall have any right as a shareholder unless and until an option has been exercised, and the Shares underlying the option have been registered in the Company's share register.

24. <u>Effective Date and Term of Plan</u>. The Plan became effective August [ ], 2019 and no rights shall be granted hereunder after the earliest to occur of (a) the Plan's termination by the Company or (b) the issuance of all Shares available for issuance under the Plan.

25. <u>Applicable Law</u>. The applicable laws of the Republic of Singapore shall govern all questions concerning the construction, validity and interpretation of this Plan unless this Plan so specifies the interpretation of other applicable laws then, in such case, those applicable laws shall govern. The applicable laws shall include but not be limited to (i) applicable laws of the Republic of Singapore, including but not limited to, the Singaporean Equity Remuneration Incentive Scheme and the Income Tax Act of Singapore; (ii) applicable laws of the United States, including but not limited to, United States federal and state securities laws and the Code; (iii) applicable laws of Japan, including but not limited to, the Financial Instruments and Exchange Act of Japan; (iv) any stock exchange or quotation system on which the Ordinary Shares are listed or quoted; and (v) the applicable laws of any foreign country or jurisdiction where Awards are granted under the Plan.



LIFE SCIENCES VOTE PROCESSING C/O BROADRIDGE 51 MERCEDES WAY EDGEWOOD, NY 11717

#### VOTE BY MAIL

Mark, sign and date your proxy card and return it in the postage-paid envelope we have provided or return it to Vote Processing, c/o Broadridge, 51 Mercedes Way, Edgewood, NY 11717.

TO VOTE, MARK BLOCKS BELOW IN BLUE OR BLACK INK AS FOLLOWS:

E82231-P27354 KEEP THIS PORTION FOR YOUR RECORDS \_\_\_\_\_ DETACH AND RETURN THIS PORTION ONLY THIS PROXY CARD IS VALID ONLY WHEN SIGNED AND DATED. WAVE LIFE SCIENCES LTD. The Board of Directors recommends a vote FOR all of the director nominees listed in Proposal 1 and FOR Proposals 2, 3, 4, 5 and 6, and ONE YEAR on Proposal 7. The Election of the Nominees for Director: For Against Abstain 1. Ο Ο Ο 1a. Paul B. Bolno, M.D., MBA 1b. Christian Henry Ο Ο Ο For Against Abstain To approve the Company's payment of cash and equity-based compensation to non-employee directors for service on the Board of Directors and its committees, in the manner and on the basis set forth under "Proposal 3: Non-Employee Directors' Compensation" 3. 0 0 Ο 0 Ο Ο 1c. Peter Kolchinsky, Ph.D. To authorize the Board of Directors to allot and issue Ordinary Shares of Wave Life Sciences Ltd. Ο Ο Ο Ο Ο Ο 4. 1d. Koji Miura Ο Ο Ο Ο Ο Ο 1e. Adrian Rawcliffe 5. To approve the Company's 2019 Employee Share Purchase Plan To approve by a non-binding advisory vote the compensation of our named executive officers as disclosed in the proxy statement 6. Ο Ο Ο Ο Ο Ο 1f. Ken Takanashi One Two Three Ο Ο 0 1g. Gregory L. Verdine, Ph.D. Year Years Years Abstain To approve the re-appointment of KPMG LLP to serve as our independent registered public accounting firm and independent Singapore auditor for the year ending December 31, 2019, and to authorize the Audit Committee of the Board of Directors to fix KPMG LLP's remuneration for services provided through the date of our 2020 Annual General Meeting of Shareholders 2. To approve by a non-binding advisory vote the frequency of holding future advisory votes on the compensation of our named executive officers 7. Ο Ο Ο Ο Ο Ο Ο 8. To transact such other business as may properly come before the 2019 Annual General Meeting of Shareholders and all adjournments or postponements thereof For address changes and/or comments, please check this box and write them on the back Ο re indicated 0 0 Please indicate if you plan to attend the 2019 Annual General Meeting. Yes No Please sign exactly as your name(s) appear(s) hereon. When signing as attorney, executor, administrator, or other fiduciary, please give full title as such. Joint owners should each sign personally. All holders must sign. If a corporation or partnership, please sign in full corporate or partnership name by authorized officer. Signature [PLEASE SIGN WITHIN BOX] Date Signature (Joint Owners) Date

#### Wave Life Sciences Ltd. 2019 Annual General Meeting of Shareholders

Thursday, August 8, 2019, 11:00 a.m., Eastern Time

Wave Life Sciences Ltd. 733 Concord Avenue, Cambridge, MA 02138

Upon arrival, please present this admission ticket and photo identification at the registration desk.

IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS FOR THE 2019 ANNUAL GENERAL MEETING OF SHAREHOLDERS: The notice, proxy statement and our 2018 annual report to shareholders are available for viewing, printing and downloading at https://materials.proxyvote.com/.

Vote by Mail

Whether or not you expect to attend the 2019 Annual General Meeting of Shareholders, please mark, sign and date your proxy card and return it in the postage-paid envelope we have provided or return it to Vote Processing, c/o Broadridge, 51 Mercedes Way, Edgewood, NY 11717.

YOUR PROXY CARD MUST BE RECEIVED AT THE ADDRESS ABOVE NOT LESS THAN 48 HOURS BEFORE THE TIME APPOINTED FOR HOLDING THE 2019 ANNUAL GENERAL MEETING OF SHAREHOLDERS (OR WITHIN SUCH OTHER TIME AS MAY BE REQUIRED BY THE SINGAPORE COMPANIES ACT).

E82232-P27354

# Proxy - WAVE LIFE SCIENCES LTD. (Incorporated in the Republic of Singapore; Company Registration Number 201218209G) 2019 Annual General Meeting of Shareholders August 8, 2019 This proxy is solicited by the Board of Directors

Paul B. Bolno, M.D., MBA, and in his absence, Linda Rockett, Esq., each with the power of substitution and each with the full power to act alone, are hereby authorized as Proxies to represent and vote the ordinary shares of Wave Life Sciences Ltd. owned by the undersigned, with all the powers which the undersigned would possess if personally present, at the 2019 Annual General Meeting of Shareholders of Wave Life Sciences Ltd. to be held on August 8, 2019 or at any postponement or adjournment thereof.

Shares represented by this proxy will be voted by the Proxies as directed herein by the shareholder. If no such directions are indicated, the Proxies will have authority to vote FOR the director nominees listed in Proposal 1, FOR Proposal 2, FOR Proposal 3, FOR Proposal 4, FOR Proposal 5, FOR Proposal 6, and ONE YEAR on Proposal 7.

In their discretion, the Proxies are authorized to vote upon such other business as may properly come before 2019 Annual General Meeting of Shareholders or at any adjournment or postponement thereof.

Address Changes/Comments:

(If you noted any Address Changes/Comments above, please mark corresponding box on the reverse side.)

Continued and to be signed on reverse side