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

FORM 10-K/A
(Amendment No. 2)

(Mark One)

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

For the fiscal year ended December 31, 2017

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

For the transition period from _____ to _____

Commission File No. 001-37627

WAVE LIFE SCIENCES LTD.
(Exact name of registrant as specified in its charter)

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

+65 6236 3388
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	**Name of Each Exchange on Which Registered**
$0 Par Value Ordinary Shares	**The Nasdaq Global Market**

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. Yes ☐ No ☒

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

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

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

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

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

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

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

The aggregate market value of the registrant's voting and non-voting ordinary shares held by non-affiliates of the registrant (without admitting that any person whose shares are not included in such calculation is an affiliate) computed by reference to the price at which the ordinary shares were last sold as of the last business day of the registrant's most recently completed second fiscal quarter (June 30, 2017) was $288,724,657.

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

DOCUMENTS INCORPORATED BY REFERENCE

None.

EXPLANATORY NOTE

This Amendment No. 2 on Form 10-K/A (this "Amendment") amends the Annual Report on Form 10-K of Wave Life Sciences Ltd. (the "Company," "we," "our," "us" or "Wave") for the fiscal year ended December 31, 2017, as originally filed with the Securities and Exchange Commission (the "SEC") on March 12, 2018 (the "Original 10-K"), and as amended by Amendment No. 1 on Form 10-K/A filed on April 27, 2018 ("Amendment No. 1"). Amendment No. 1 was filed solely to include information required by Part III of the Annual Report on Form 10-K that was intentionally omitted from Part III of the Original 10-K (the "Amended Form 10-K").

The sole purpose of this Amendment is for KPMG LLP ("KPMG") to update and clarify its Report of Independent Registered Public Accounting Firm (the "Audit Report") that was included in our Original 10-K. KPMG requested that we file this Amendment to insert the following in its Audit Report to clarify that KPMG was not required to, and did not, audit Wave's internal control over financial reporting: "*The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion*." KPMG inadvertently omitted these three sentences from the previously filed Audit Report.

KPMG's update to its Audit Report does not in any way affect KPMG's unqualified opinion or otherwise change any of the conclusions expressed by KPMG in the Audit Report, or any disclosures in Part II, Item 8 or Part IV, Item 15 of the Original 10-K.

Pursuant to Rule 12b-15 promulgated under the Securities Exchange Act of 1934, as amended, we have included the entire text of Part II, Item 8 in this Amendment. In addition, we have included Part IV, Item 15 in this Amendment to reflect a new consent of KPMG and new certifications by our principal executive officer and principal financial officer under Section 302 and Section 906 of the Sarbanes-Oxley Act of 2002; however, paragraphs 4 and 5 of the certifications under Section 302 of the Sarbanes-Oxley Act of 2002 have been omitted because this Amendment does not contain or amend any disclosure with respect to Items 307 and 308 of Regulation S-K.

Except as described above, no other changes have been made to the Original 10-K. The Original 10-K and Amendment No. 1 continue to speak as of the dates described in the Original 10-K and Amendment No. 1, respectively, and this Amendment speaks as of the filing date of the Original 10-K, and we have not updated the disclosures contained therein to reflect any events that occurred subsequent to such dates. Accordingly, this Amendment should be read in conjunction with the Company's filings made with the SEC subsequent to the filing of the Original 10-K, as information in such filings may update or supersede certain information contained in this Amendment. As used in this Amendment, unless otherwise stated or the context otherwise indicates, references to "Wave," the "Company," "we," "our," "us" or similar terms refer to Wave Life Sciences Ltd. and our wholly owned subsidiaries.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Amendment contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), that involve substantial risks and uncertainties. In some cases, forward-looking statements are identified by the words "anticipate," "believe," "continue," "could," "estimate," "expect," "future," "goals," "intend," "likely," "may," "might," "ongoing," "objective," "plan," "potential," "predict," "project," "seek," "should," "strategy," "target," "will" and "would" or the negative of these terms, or other comparable terminology intended to identify statements about the future. These statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from the information expressed or implied by these forward-looking statements. Although we believe that we have a reasonable basis for each forward-looking statement contained in this Amendment, such statements are based on a combination of facts and factors currently known by us and our expectations of the future, about which we cannot be certain. Forward-looking statements include statements about our ability to fund our working capital requirements; our success, cost and timing of our product development activities and clinical trials; the timing of and our ability to obtain and maintain regulatory approvals for any of our product candidates; our ability to identify and develop new product candidates; our intellectual property position; our commercialization, marketing and manufacturing capabilities and strategy; our ability to develop sales and marketing capabilities; our estimates regarding future expenses and needs for additional financing; our ability to identify, recruit and retain key personnel; our financial performance; and developments and projections relating to our competitors in the industry. You should refer to the "Risk Factors" section in the Original 10-K and in our other filings with the Securities and Exchange Commission for a discussion of important factors that may cause our actual results to differ materially from those expressed or implied by our forward-looking statements. As a result of these factors, we cannot assure you that the forward-looking statements in this Amendment will prove to be accurate. Furthermore, if our forward-looking statements prove to be inaccurate, the inaccuracy may be material. In light of the significant uncertainties in these forward-looking statements, these statements should not be regarded as representations or warranties by us or any other person that we will achieve our objectives and plans in any specified time frame, or at all. We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

EMERGING GROWTH COMPANY—SCALED DISCLOSURE

We are an emerging growth company, as defined in the Jumpstart Our Business Startups Act of 2012 (the "JOBS Act"), enacted in April 2012. We intend to take advantage of certain exemptions under the JOBS Act from various public company reporting requirements, including not being required to have our internal control over financial reporting audited by our independent registered public accounting firm pursuant to Section 404(b) of the Sarbanes-Oxley Act of 2002, reduced disclosure obligations regarding executive compensation and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and any golden parachute payments not previously approved. We may take advantage of these exemptions for up to five years after our initial public offering that occurred in November 2015 or until we are otherwise no longer an emerging growth company, whichever is earlier.

WAVE LIFE SCIENCES LTD.

FORM 10-K/A

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PART II

Item 8. Financial Statements and Supplementary Data

The information required by this Item 8 is included at the end of this Amendment No. 2 to Annual Report on Form 10-K/A beginning on page F-1.

PART IV

Item 15. Exhibits, Financial Statement Schedules.

Item 15(a). The documents listed below are filed as part of this Amendment.

Item 15(a)(1) and (2). See Index to Consolidated Financial Statements on page F-1 of this Amendment. Other financial statement schedules have not been included because they are not applicable or the information is included in the financial statements or notes thereto.

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

Exhibit Number	Exhibit Description	Filed with this Report	Incorporated by Reference herein from Form or Schedule	Filing Date	SEC File/Reg. Number
3.1	Constitution (formerly known as Memorandum of Association and Articles of Association)		Amendment No. 5 to Form S-1 (Exhibit 3.2)	11/10/2015	333-207379
4.1	Form of Specimen Ordinary Share Certificate		Amendment No. 3 to Form S-1 (Exhibit 4.1)	11/06/2015	333-207379
4.2	Investors' Rights Agreement by and among the Registrant and certain of its shareholders, dated as of August 14, 2015		Form S-1 (Exhibit 4.2)	10/09/2015	333-207379
4.3†	Share Purchase Agreement by and between the Registrant and C.P. Pharmaceuticals International C.V., dated as of May 5, 2016		Form 10-Q (Exhibit 10.2)	08/15/2016	001-37627
Lease Agreements					
10.1	Lease Agreement by and among Harvard Real Estate—Allston, Inc., Shin Nippon Biomedical Laboratories Ltd., dated June 25, 2009		Form S-1 (Exhibit 10.2)	10/09/2015	333-207379
10.2	Commercial Lease Agreement by and among SNBL USA, Ltd. and Ontorii, Inc. (now Wave Life Sciences USA, Inc.), dated as of January 1, 2010		Form S-1 (Exhibit 10.4)	10/09/2015	333-207379
10.3	Consent to Office Space Sublease by and among SNBL USA, Ltd, Ontorii, Inc. (now Wave Life Sciences USA, Inc.) and Harvard Real Estate—Allston, Inc., dated as of January 1, 2010		Form S-1 (Exhibit 10.3)	10/09/2015	333-207379
10.4	Amendment 1 to the Commercial Lease Agreement by and between SNBL USA, Ltd. and Ontorii, Inc. (now Wave Life Sciences USA, Inc.), dated as of July 1, 2011		Form S-1 (Exhibit 10.5)	10/09/2015	333-207379
10.5	Lease Agreement by and between the Registrant and King 733 Concord LLC, dated as of April 6, 2015		Form S-1 (Exhibit 10.7)	10/09/2015	333-207379

Exhibit Number	Exhibit Description	Filed with this Report	Incorporated by Reference herein from Form or Schedule	Filing Date	SEC File/Reg. Number
10.6	Lease Agreement by and between Wave Life Sciences USA, Inc. and King 115 Hartwell LLC, dated as of September 26, 2016.		Form 8-K (Exhibit 10.1)	09/27/2016	001-37627
10.7	First Amendment (to Lease) by and between Wave Life Sciences USA, Inc. and King 115 Hartwell LLC, dated as of December 31, 2016		Form 8-K (Exhibit 10.1)	01/06/2017	001-37627
Collaboration and License Agreements					
10.8†	Co-Exclusive License Agreement by and between the Registrant and Max-Planck-Innovation GmbH, dated as of June 8, 2015		Form S-1 (Exhibit 10.10)	10/09/2015	333-207379
10.9.1†	Research, License and Option Agreement by and between the Registrant and Pfizer Inc., dated as of May 5, 2016		Form10-Q (Exhibit 10.1)	08/15/2016	001-37627
10.9.2	Amendment No. 1 to Research, License and Option Agreement by and between the Registrant and Pfizer Inc., dated as of November 5, 2017		Form 10-K (Exhibit 10.9.2)	03/12/2018	001-37627
Agreements with Executive Officers and Directors					
10.10+	Form of Deed of Indemnity by and between the Registrant and each of its directors and certain of its officers		Form S-1 (Exhibit 10.11)	10/09/2015	333-207379
10.11+	Employment Agreement by and between the Registrant and Paul B. Bolno, M.D., dated as of December 12, 2013		Form S-1 (Exhibit 10.12)	10/09/2015	333-207379
10.12+	Offer Letter by and between the Registrant and Chandra Vargeese, Ph.D., dated as of July 2, 2014		Form S-1 (Exhibit 10.14)	10/09/2015	333-207379
10.13+	Offer Letter by and between the Registrant and Christopher Francis, Ph.D., dated as of March 10, 2014		Form S-1 (Exhibit 10.15)	10/09/2015	333-207379
10.14+	Employment Agreement between the Registrant and Michael Panzara, M.D. dated as of July 11, 2016		Form 10-Q (Exhibit 10.4)	11/09/2016	001-37627
10.15+	Employment Agreement between the Registrant and Keith C. Regnante dated as of August 16, 2016		Form 10-Q (Exhibit 10.5)	11/09/2016	001-37627
10.16+	Non-Employee Director Compensation Policy effective as of November 10, 2016.		Form 8-K (Exhibit 10.1)	11/10/2016	001-37627
10.17+	Consulting Agreement by and between Ontorii, Inc. (now Wave Life Sciences USA, Inc.) and Gregory Verdine, dated as of April 1, 2012		Form S-1 (Exhibit 10.16)	10/09/2015	333-207379

Exhibit Number	Exhibit Description	Filed with this Report	Incorporated by Reference herein from Form or Schedule	Filing Date	SEC File/Reg. Number
10.18+	Nominee Director Fee Agreement by and between the Registrant and Miura & Associates Management Consultants Pte. Ltd., dated as of October 23, 2012		Form S-1 (Exhibit 10.17)	10/09/2015	333-207379
Equity and Other Compensation Plans					
10.19+	Wave Life Sciences Ltd. 2014 Equity Incentive Plan, as amended		Form 10-Q (Exhibit 10.1)	11/09/2017	001-37627
10.20+	Form of Non-qualified Share Option Agreement under the 2014 Equity Incentive Plan, as amended		Form 10-Q (Exhibit 10.2)	11/09/2017	001-37627
10.21+	Form of Incentive Share Option Agreement under the 2014 Equity Incentive Plan, as amended		Form 10-Q (Exhibit 10.3)	11/09/2017	001-37627
10.22+	Form of Restricted Share Unit Agreement under the 2014 Equity Incentive Plan, as amended		Form 10-Q (Exhibit 10.4)	11/09/2017	001-37627
10.23+	Form of Non-qualified Share Option Agreement for UK Participants under the 2014 Equity Incentive Plan, as amended		Form 10-Q (Exhibit 10.5)	11/09/2017	001-37627
21.1	List of Subsidiaries of the Registrant		Form 10-K (Exhibit 21.1)	03/12/2018	001-37627
23.1	Consent of Independent Registered Public Accounting Firm	X			
24.1	Power of Attorney (included on signature page to the Original 10-K)				
31.1	Certifications of Principal Executive Officer pursuant to Rule 13a-14(a)	X			
31.2	Certifications of Principal Financial Officer pursuant to Rule 13a-14(a)	X			
32*	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, by Principal Executive Officer and Principal Financial Officer.	X			
101.INS	XBRL Instance Document		Form 10-K (Exhibit 101.INS)	03/12/2018	001-37627
101.SCH	XBRL Taxonomy Extension Schema Document		Form 10-K (Exhibit 101.SCH)	03/12/2018	001-37627
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document		Form 10-K (Exhibit 101.CAL)	03/12/2018	001-37627
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document		Form 10-K (Exhibit 101.DEF)	03/12/2018	001-37627

Exhibit Number	Exhibit Description	Filed with this Report	Incorporated by Reference herein from Form or Schedule	Filing Date	SEC File/Reg. Number
101.LAB	XBRL Taxonomy Extension Label Linkbase Document		Form 10-K (Exhibit 101.LAB)	03/12/2018	001-37627
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document		Form 10-K (Exhibit 101.PRE)	03/12/2018	001-37627

(*) The certification attached as Exhibit 32 that accompanies this Amendment is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of Wave Life Sciences Ltd. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date of this Form 10-K/A, irrespective of any general incorporation language contained in such filing.

(+) Indicates management contract or compensatory plan or arrangement.

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

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this Amendment No. 2 to Annual Report on Form 10-K/A to be signed on its behalf by the undersigned, thereunto duly authorized.

Wave Life Sciences Ltd.

Date: May 9, 2018

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

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors
Wave Life Sciences Ltd.:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Wave Life Sciences Ltd. and subsidiaries (the "Company") as of December 31, 2017 and 2016, the related consolidated statements of operations, comprehensive loss, Series A preferred shares and shareholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2017, and the related notes (collectively, the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2017 and 2016, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2017, in conformity with U.S. generally accepted accounting principles.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ KPMG LLP

We have served as the Company's auditor since 2015.

Cambridge, Massachusetts
March 12, 2018

WAVE LIFE SCIENCES LTD.
CONSOLIDATED BALANCE SHEETS

(In thousands, except share amounts)

	December 31, 2017	December 31, 2016
Assets		
Current assets:		
Cash and cash equivalents	$ 142,503	$ 150,293
Prepaid expenses and other current assets	7,985	1,483
Deferred tax assets	—	214
Total current assets	150,488	151,990
Long-term assets:		
Property and equipment, net	27,334	8,607
Deferred tax assets	—	560
Restricted cash	3,610	3,601
Other assets	411	53
Total long-term assets	31,355	12,821
Total assets	$ 181,843	$ 164,811
Liabilities, Series A preferred shares and shareholders' equity		
Current liabilities:		
Accounts payable	$ 7,598	$ 4,943
Accrued expenses and other current liabilities	8,898	4,434
Current portion of capital lease obligation	16	62
Current portion of deferred rent	60	—
Current portion of deferred revenue	2,705	2,705
Current portion of lease incentive obligation	344	11
Total current liabilities	19,621	12,155
Long-term liabilities:		
Capital lease obligation, net of current portion	—	16
Deferred rent, net of current portion	4,214	680
Deferred revenue, net of current portion	5,607	8,311
Lease incentive obligation, net of current portion	3,094	116
Other liabilities	1,619	796
Total long-term liabilities	14,534	9,919
Total liabilities	$ 34,155	$ 22,074
Series A preferred shares, no par value; 3,901,348 shares issued and outstanding	$ 7,874	$ 7,874
Shareholders' equity:		
Ordinary shares, no par value; 27,829,079 and 23,502,169 shares issued and outstanding at December 31, 2017 and 2016, respectively	310,038	215,602
Additional paid-in capital	22,172	10,029
Accumulated other comprehensive income (loss)	116	(291)
Accumulated deficit	(192,512)	(90,477)
Total shareholders' equity	139,814	134,863
Total liabilities, Series A preferred shares and shareholders' equity	$ 181,843	$ 164,811

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

WAVE LIFE SCIENCES LTD.
CONSOLIDATED STATEMENTS OF OPERATIONS

(In thousands, except share and per share amounts)

	For the Year Ended December 31,		
	2017	2016	2015
Revenue	$ 3,704	$ 1,485	$ 152
Operating expenses:			
Research and development	79,309	40,818	9,057
General and administrative	26,975	15,994	10,393
Total operating expenses	106,284	56,812	19,450
Loss from operations	(102,580)	(55,327)	(19,298)
Other income (expense), net:			
Dividend income	1,578	255	—
Interest income (expense), net	6	337	86
Other income (expense), net	(331)	(50)	56
Total other income (expense), net	1,253	542	142
Loss before income taxes	(101,327)	(54,785)	(19,156)
Income tax provision	(708)	(616)	(44)
Net loss	$ (102,035)	$ (55,401)	$ (19,200)
Net loss per share attributable to ordinary shareholders—basic and diluted	$ (3.85)	$ (2.43)	$ (1.83)
Weighted-average ordinary shares used in computing net loss per share attributable to ordinary shareholders—basic and diluted	26,513,382	22,800,628	10,501,455

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

WAVE LIFE SCIENCES LTD.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS

(In thousands, except share and per share amounts)

	For the Year Ended December 31,		
	2017	2016	2015
Net loss	$(102,035)	$(55,401)	$(19,200)
Other comprehensive loss:			
Foreign currency translation	407	(332)	(15)
Comprehensive loss	$(101,628)	$(55,733)	$(19,215)

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 A Preferred Shares		Series B Preferred Shares		Series A Preferred Shares		Ordinary Shares		Additional Paid-In-Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Shareholders' Equity
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount				
Balance as of December 31, 2014	—	$ —	—	$ —	3,901,348	$ 7,874	4,263,472	$ 9,973	$ —	$ 56	$ (15,876)	$ 2,027
Issuance of ordinary shares, net of issuance costs of $169	—	—	—	—	—	—	4,769,077	11,631	—	—	—	11,631
Share-based compensation	—	—	—	—	—	—	190,856	842	3,182	—	—	4,024
Issuance of Series B preferred, net of issuance costs of $3,468	—	—	5,334,892	62,532	—	—	—	—	—	—	—	—
Reclassification of Series A preferred shares	3,901,348	7,874	—	—	(3,901,348)	(7,874)	—	—	—	—	—	(7,874)
Issuance of ordinary shares upon initial public offering, net of issuance costs of $3,702	—	—	—	—	—	—	6,993,126	100,366	—	—	—	100,366
Conversion of Series B preferred shares into ordinary shares upon initial public offering	—	—	(5,334,892)	(62,532)	—	—	5,334,892	62,532	—	—	—	62,532
Other comprehensive loss	—	—	—	—	—	—	—	—	—	(15)	—	(15)
Net loss	—	—	—	—	—	—	—	—	—	—	(19,200)	(19,200)
Balance at December 31, 2015	3,901,348	$ 7,874	—	$ —	—	$ —	21,551,423	$185,344	$ 3,182	$ 41	$ (35,076)	$ 153,491
Issuance of ordinary shares	—	—	—	—	—	—	1,875,000	30,000	—	—	—	30,000
Share-based compensation	—	—	—	—	—	—	—	—	6,847	—	—	6,847
Option exercises	—	—	—	—	—	—	75,746	258	—	—	—	258
Other comprehensive loss	—	—	—	—	—	—	—	—	—	(332)	—	(332)
Net loss	—	—	—	—	—	—	—	—	—	—	(55,401)	(55,401)
Balance at December 31, 2016	3,901,348	$ 7,874	—	$ —	—	$ —	23,502,169	$215,602	$ 10,029	$ (291)	$ (90,477)	$ 134,863
Issuance of ordinary shares, net of issuance costs of $491	—	—	—	—	—	—	4,166,667	93,509	—	—	—	93,509
Share-based compensation	—	—	—	—	—	—	—	—	12,143	—	—	12,143
Vesting of RSUs	—	—	—	—	—	—	22,750	—	—	—	—	—
Option exercises	—	—	—	—	—	—	137,493	927	—	—	—	927
Other comprehensive loss	—	—	—	—	—	—	—	—	—	407	—	407
Net loss	—	—	—	—	—	—	—	—	—	—	(102,035)	(102,035)
Balance at December 31, 2017	3,901,348	$ 7,874	—	$ —	—	$ —	27,829,079	$310,038	$ 22,172	$ 116	$ (192,512)	$ 139,814

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,		
	2017	2016	2015
Cash flows from operating activities			
Net loss	$(102,035)	$ (55,401)	$ (19,200)
Adjustments to reconcile net loss to net cash flows used in operating activities:			
Amortization of lease incentive obligation	(208)	—	—
Depreciation and amortization	2,155	784	594
Share-based compensation expense	12,143	6,847	4,024
Deferred rent	3,594	565	88
Loss on disposal of property and equipment	205	—	—
Deferred income taxes	774	(564)	36
Tax benefit related to share-based compensation	—	(310)	—
Changes in operating assets and liabilities:			
Prepaid expenses and other current assets	(6,502)	(1,337)	130
Other non-current assets	(358)	—	—
Accounts payable	3,892	3,369	1,648
Accrued expenses and other current liabilities	4,550	2,296	267
Deferred revenue	(2,704)	11,015	(152)
Other non-current liabilities	823	864	38
Net cash used in operating activities	(83,671)	(31,872)	(12,527)
Cash flows from investing activities			
Increase in restricted cash	(9)	(2,599)	(1,055)
Proceeds from government grant reimbursements for property and equipment	—	—	3
Proceeds from the sale of property and equipment	—	4	—
Purchases of property and equipment	(18,887)	(5,567)	(1,857)
Net cash used in investing activities	(18,896)	(8,162)	(2,909)
Cash flows from financing activities			
Proceeds from initial public offering, net of offering costs and underwriter commissions	—	—	101,444
Costs associated with initial public offering		(1,075)	—
Proceeds from issuance of ordinary shares, net of offering costs	93,509	30,000	11,631
Proceeds from issuance of Series B preferred shares, net of offering costs	—	—	62,532
Proceeds from government grant	—	—	112
Payments on capital lease obligation	(62)	(62)	(126)
Proceeds from the exercise of share options	927	258	—
Net cash provided by financing activities	94,374	29,121	175,593
Effect of foreign exchange rates on cash	403	(14)	15
Net increase (decrease) in cash and cash equivalents	(7,790)	(10,927)	160,172
Cash and cash equivalents at beginning of period	150,293	161,220	1,048
Cash and cash equivalents at end of period	$ 142,503	$150,293	$161,220
Supplemental disclosure of cash flow information:			
Deferred offering costs in accounts payable and accrued expenses at period end	$ —	$ —	$ 1,075
Cash paid for interest	$ 37	$ 29	$ —
Cash paid for taxes, net of refunds	$ (11)	$ 554	$ —
Equipment acquired for capital lease obligation	$ —	$ —	$ 268
Property and equipment purchases in accounts payable and accrued expenses at period end	$ 339	$ 1,653	$ 306
Tenant improvements paid for by the landlord during the period	$ 2,774	$ 128	$ —
Tenant improvements to be reimbursed by the landlord	$ 745	$ —	$ —

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 biotechnology company with an innovative and proprietary synthetic chemistry drug development platform that the Company is using to rationally design, develop and commercialize a broad pipeline of first-in-class or best-in-class nucleic acid therapeutic candidates for genetically defined diseases. Nucleic acid therapeutics are a growing and innovative class of drugs that have the potential to address diseases that have historically been difficult to treat with small molecule drugs or biologics. Nucleic acid therapeutics, or oligonucleotides, are comprised of a sequence of nucleotides that are linked together by a backbone of chemical bonds. The Company is initially developing oligonucleotides that target genetic defects to either reduce the expression of disease-promoting proteins or transform the production of dysfunctional mutant proteins into the production of functional proteins.

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

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

Risks and Uncertainties

The Company is subject to risks common to companies in the biotechnology industry including, but not limited to, new technological innovations, protection of proprietary technology, 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 will be successfully completed, that adequate protection for the Company's intellectual property will be obtained, that any products developed will obtain necessary government regulatory approval or that any approved products will be commercially viable. Even if the Company's product development efforts are successful, it is uncertain when, if ever, the Company will generate significant revenue from product sales. The Company operates in an environment of rapid change in technology and substantial competition from pharmaceutical and biotechnology companies. In addition, the Company is dependent upon the services of its employees and consultants.

The Company has never been profitable, and since its inception has incurred recurring operating losses. The Company expects to incur significant expenses and increasing operating losses for the foreseeable future. To date, the Company has primarily funded its operations through private placements of debt and equity securities, public offerings of its ordinary shares and collaborations with third parties. As of December 31, 2017, the Company has received an aggregate of approximately $323.2 million in net proceeds from these transactions. The Company received $89.3 million in net proceeds from private placements of its debt and equity securities, $100.4 million in net proceeds ($111.9 million gross proceeds) from its initial public offering, inclusive of the over-allotment exercise, $40.0 million under the Pfizer Agreements, including $10.0 million as an upfront payment under the Pfizer Collaboration Agreement and $30.0 million in the form of an equity investment, and $93.5 million in net proceeds ($100.0 million gross proceeds) from its April 2017 follow-on underwritten public offering.

Basis of Presentation

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

2. SIGNIFICANT ACCOUNTING POLICIES

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 significant intercompany balances and transactions have been eliminated in consolidation.

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and 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 Series A preferred shares on conversion of the related party notes payable, 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 period over which revenue is recognized under the Pfizer Collaboration Agreement (as defined in Note 5), 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 contract research organizations and contract manufacturing organizations and the valuation allowance required for the Company's deferred tax assets and determining uncertain tax positions and the related liabilities. Estimates are periodically reviewed in light of changes in circumstances, facts and experience. Actual results could differ from the Company's estimates.

Segment Data

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

Foreign Currency Translation

The functional currency 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. Prior to 2017, Wave Japan had intercompany loans payable to Wave that were not expected to be settled in the foreseeable future which were therefore translated at the historical rate for the date of each capital transaction. In 2017, Wave Japan repaid the intercompany loans which resulted in a foreign exchange loss which is included in the consolidated statements of operations within other income (expense), net. Net unrealized gains and losses from foreign currency translation are reflected as accumulated other comprehensive (loss) income within Series A preferred shares and shareholders' equity and consolidated statements of comprehensive loss. Gains and losses on foreign currency transactions are included in the consolidated statements of operations 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 and cash equivalents are Level 1 assets which are comprised of funds held in readily available checking and money market accounts. Cash and cash equivalents were recorded at fair value as of December 31, 2017 and 2016, totaling $142.5 million and $150.3 million, respectively. The carrying amounts of accounts receivable, accounts payable and accrued expenses approximate their fair values due to their short-term maturities.

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, 2017 and 2016, the Company had $3.6 million of restricted cash, of which $2.6 million related to the Lexington facility and the remaining $1.0 million related to the Cambridge facility.

Property and Equipment

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

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

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

Impairment of Long-Lived Assets

Long-lived assets consist of property and equipment. Long-lived assets are reviewed for impairment whenever events or other changes in circumstances indicate that the carrying amount may not be recoverable. Certain factors may exist or events may occur 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.

Through December 31, 2017, the Company has not recognized any impairment charges.

Revenue Recognition

As of December 31, 2017, the Company's only significant source of revenue is derived from the Pfizer Collaboration Agreement (as defined in Note 5), pursuant to which the Company and Pfizer (as defined in Note 5) have agreed to collaborate on the discovery, development and commercialization of stereopure oligonucleotide therapeutics for the Pfizer Programs (as defined in Note 5), each directed at a genetically-defined hepatic target selected by Pfizer. The Company entered into the Pfizer Collaboration Agreement in May 2016.

The Company presents revenue from the Pfizer Collaboration Agreement under Financial Accounting Standards Board ("FASB"), Accounting Standards Codification ("ASC") Topic 808, Collaborative Arrangements ("ASC 808"). In addition, the Company recognizes revenue in accordance with ASC Topic 605, Revenue Recognition ("ASC 605"). Accordingly, revenue is recognized for each unit of accounting when all of the following criteria are met:

- persuasive evidence of an arrangement exists;
- delivery has occurred or services have been rendered;
- the seller's price to the buyer is fixed or determinable; and
- collectability is reasonably assured.

Amounts received prior to satisfying the revenue recognition criteria 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.

Pursuant to the accounting guidance in ASC 605-25, the Company evaluates multiple-element arrangements to determine (1) the deliverables included in the arrangement and (2) whether the individual deliverables represent separate units of accounting or whether they must be accounted for as a combined unit of accounting. This evaluation involves subjective determinations and requires the Company to make judgments about the individual deliverables and whether such deliverables are separable from the other aspects of the contractual relationship. Deliverables are considered separate units of accounting provided that the delivered item has value to the customer on a standalone basis and, if the arrangement includes a general right of return relative to the delivered item, delivery or performance of the undelivered item is considered probable and substantially in the Company's control. In assessing whether an item has standalone value, the Company considers factors such as the research, development, manufacturing and commercialization capabilities of the collaboration partner and the availability of the associated expertise in the general marketplace. In addition, the Company considers whether the collaboration partner can use a deliverable for its intended purpose without the receipt of the remaining deliverable, whether the value of the deliverable is dependent on the undelivered item and whether there are other vendors that can provide the undelivered items.

Under the Pfizer Collaboration Agreement, the Company and Pfizer agreed to collaborate on the discovery, development and commercialization of up to five Pfizer Programs, two of the five targets were declared upon initiation of the agreement in May 2016. The Pfizer Collaboration Agreement provides Pfizer with certain options to nominate up to three remaining programs and the Company is required to consider whether such options are substantive. Options are considered substantive if, at the inception of the arrangement, the Company is at risk as to whether the collaboration partner will choose to exercise the option. Factors that the Company considers in evaluating whether an option is substantive include whether the optional elements are essential to the functionality of other programs nominated, whether economic factors compel Pfizer to purchase the optional elements, the cost to exercise the option, the overall objective of the arrangement and, the benefit Pfizer might obtain from the arrangement without exercising the option. In August 2016, Pfizer nominated the third hepatic target under the Collaboration and pursuant to the terms of the Pfizer Collaboration Agreement, Pfizer had the option to nominate two additional targets by November 5, 2017. On November 5, 2017, the Company amended its Pfizer Collaboration Agreement to extend the target nomination period from November 5, 2017 to May 5, 2018. This amendment provides Pfizer with an additional six months to nominate the two remaining hepatic targets under the Pfizer Collaboration Agreement.

When an option is considered substantive and there is no significant incremental discount, the option is not considered a deliverable in the arrangement and no consideration is allocated to it. Conversely, when an option is not considered substantive or it is considered substantive but is priced at an incremental discount, it is analyzed to determine if it should be combined with other deliverables in the arrangement. Options that are substantive and priced at a significant and incremental discount are further assessed to determine whether a portion of the upfront payment should be allocated to the option and other deliverables in the arrangement.

At the inception of an arrangement that includes milestone payments, the Company evaluates whether each milestone is substantive and at risk to both parties on the basis of the contingent nature of the milestone. This evaluation includes an assessment of whether: (1) the consideration is commensurate with either the Company's performance to achieve the milestone or the enhancement of the value of the delivered item(s) as a result of a specific outcome resulting from its performance to achieve the milestone, (2) the consideration relates solely to past performance and (3) the consideration is reasonable relative to all of the deliverables and payment terms within the arrangement. The Company evaluates factors such as the scientific, clinical, regulatory, commercial, and other risks that must be overcome to achieve the particular milestone and the level of effort and investment required to achieve the particular milestone in making this assessment. There is considerable judgment involved in determining whether a milestone satisfies all of the criteria required to conclude that a milestone is substantive. Revenue from substantive milestones will be recognized in its entirety upon successful accomplishment of the milestone.

Aside from the program nomination payments, which relate to the options described above, the remaining milestone payments required under the Pfizer Collaboration Agreement are contingent upon the Company's performance under the Pfizer Collaboration Agreement, including in certain instances, regulatory approval. The Company views these milestones as substantive and has excluded the amounts as allocable consideration at the outset of the arrangement. All commercial milestones will be accounted for in the same manner as royalties and recorded as revenue upon achievement of the milestone, assuming all other revenue recognition criteria are met.

The Company recognizes arrangement consideration allocated to each unit of accounting when all of the revenue recognition criteria in ASC 605 are satisfied for that particular unit of accounting. In the event that a deliverable does not represent a separate unit of accounting, the Company recognizes revenue from the combined unit of accounting over the Company's contractual or estimated performance period for the undelivered elements, which is typically the term of the Company's research and development obligations. If there is no discernible pattern of performance or objectively measurable performance measures do not exist, then the Company recognizes revenue under the arrangement on a straight-line basis over the period the Company is expected to complete its performance obligations. Conversely, if the pattern of performance in which the service is provided to the customer can be determined and objectively measurable performance measures exist, then the Company recognizes revenue under the arrangement using the proportional performance method. Revenue recognized is limited to the lesser of the cumulative amount of payments received or the cumulative amount of revenue earned, as determined using the straight-line method or proportional performance method, as applicable, as of the period ending date.

The Company has concluded that the deliverables under the Pfizer Collaboration Agreement relate primarily to the research and development required by the Company for each of the programs nominated by Pfizer. The remaining deliverables, including sample supplies provided by each party to fulfill its obligation as a licensee, participation on a joint steering committee to oversee the research and development activities, and regulatory responsibilities related to filings and obtaining approvals related to the products that may result from each program do not represent separate units of accounting based on their dependence on the research and development efforts.

Because there is no discernible pattern of performance given the nature of the research and development efforts, the Company recognizes the allocated revenue for each deliverable under the Pfizer Collaboration Agreement on a straight-line basis over the period the Company is expected to complete its performance obligations for each deliverable, or unit of accounting. For the first two Pfizer Programs, this period is expected to be from the initiation date of the Pfizer Collaboration Agreement, which was May 5, 2016, and for the other Pfizer Programs, the period is expected to be from the date that work commences on those programs through the earlier of (a) the termination of the research and development performance obligations under the Pfizer Collaboration Agreement, which is May 5, 2020 (the "Research Term"), or (b) the estimated date the Company expects to meet its research and development performance obligations under the Pfizer Collaboration Agreement. Given the uncertainty as to when the research and development performance obligations will be completed, the Company has used the Research Term for purposes of applying the straight-line method for revenue recognition for the year ended December 31, 2017.

Product Revenue

The Company has had no product revenue to date.

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.

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 issuances of equity instruments issued to non-employees as consideration for goods or services received by the Company are accounted for based on the fair value of the equity instruments issued. These awards are recorded in expense and additional paid-in capital in shareholders' 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 in the same manner in which the award recipient's payroll costs are classified or in which the award recipients' service payments are classified.

Prior to the Company's initial public offering ("IPO") in November 2015, the fair value of the ordinary shares underlying its share-based awards was estimated on each grant date by the board of directors. The board of directors determined the estimated per share fair value of the Company's ordinary shares at various dates considering contemporaneous and retrospective valuations performed in accordance with the guidance outlined in the American Institute of Certified Public Accountants Practice Aid, *Valuation of Privately-Held Company Equity Securities Issued as Compensation* ("the Practice Aid"). After the closing of the Company's IPO, 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.

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

- *Fair Value of Ordinary Shares*. As discussed above, prior to the Company's IPO, the fair value of the Company's ordinary shares underlying the Company's share options was historically determined by the board of directors. Because prior to the Company's IPO, there was no public market for the Company's ordinary shares, the board of directors determined the fair value of the Company's ordinary shares at the time of grant of the option by considering a number of objective and subjective factors, including valuations of comparable companies, sales of its shares to unrelated third parties, operating and financial performance and general and industry specific economic outlook. Following the completion of the Company's IPO, 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 taxing authorities. If the tax position is deemed more-likely-than-not to be sustained, the tax position is then assessed to determine the amount of benefit to recognize in the financial statements. The amount of the benefit that may be recognized is the largest amount that has a greater than 50% likelihood of being realized upon ultimate settlement. The provision for income taxes includes the effects of any resulting tax reserves, or unrecognized tax benefits, that are considered appropriate as well as the related net interest and penalties.

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

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 the related ongoing results of the comparable companies.

Recently Issued Accounting Pronouncements

In May 2014, the FASB issued Accounting Standards Update ("ASU") No. 2014-09, Revenue from Contracts with Customers (Topic 606) ("ASU 2014-09"), which supersedes the revenue recognition requirements in ASC 605-25, *Multiple-Element Arrangements* and most industry-specific guidance. In addition, the FASB recently issued ASUs 2016-10 and 2016-12, which provide clarifying amendments to ASU 2014-09. ASU 2014-09 and its related amendments will be effective for the Company for interim and annual periods beginning after December 15, 2017. The new standard requires that an entity recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. The update also requires additional disclosure about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments and assets recognized from costs incurred to obtain or fulfill a contract. Companies have the option of applying this new guidance retrospectively to each prior reporting period presented (the full retrospective method) or retrospectively with the cumulative effect of initially applying this update recognized at the date of initial application (the modified retrospective method). The Company will adopt the new standard effective January 1, 2018 under the full retrospective method.

Under ASC 606, an entity recognizes revenue when its customer obtains control of promised goods or services, in an amount that reflects the consideration which 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 steps: (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. ASC 606 also impacts certain other areas, such as the accounting for costs to obtain or fulfill a contract. The standard also requires disclosure of the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers.

The Company is assessing but has not yet completed its assessment of the impact of the adoption of this standard on its consolidated financial statements. Therefore, the Company does not know and cannot reasonably estimate the impact that adoption of ASC 606 is expected to have on the consolidated financial statements. Currently, the Company anticipates a potential impact on the revenue recognition method used to recognize revenue for the identified performance obligations under the Pfizer Collaboration Agreement as well as the recognition of milestone revenue prior to achievement. The expected impact is further described below. Estimated impacts from the adoption of this standard could differ upon the final adoption and implementation of the standard.

With respect to the Pfizer Collaboration Agreement, the Company currently expects the five performance obligations identified under the provisions of ASC 606 will be consistent with the five units of accounting identified under the provisions of ASC 605. However, as previously described, it currently expects that the timing and pattern of revenue recognition under step (v) above will differ from the pattern of revenue recognition under ASC 605. Under ASC 606, the revenues will be recognized over time. As of December 31, 2017, the Company had recognized $5.2 million of revenue under the Pfizer Collaboration Agreement. Deferred revenue related to the Pfizer Collaboration Agreement amounted to $8.3 million as of December 31, 2017, of which $2.7 million is included in current liabilities. The Company expects a change in the timing and pattern of revenue recognition upon adoption of ASC 606 to impact the Company's revenue, deferred revenue and net loss.

The Company expects the accounting for contingent milestone payments under its collaboration agreements to change under ASC 606. ASC 606 does not contain guidance specific to milestone payments, thereby requiring contingent milestone payments to be considered in accordance with the overall model of ASC 606. Revenue from contingent milestone payments may be recognized earlier under ASC 606 than under ASC 605, based on an assessment of the probability of achievement of the milestone event and the likelihood of a significant reversal of such milestone revenue at each reporting date. This assessment may result in the recognition of revenue related to a contingent milestone payment before the milestone event has been achieved.

ASC 606 requires more robust disclosures than required by previous guidance, including disclosures related to disaggregation of revenue into appropriate categories, performance obligations, the judgments made in revenue recognition determinations, adjustments to revenue which relate to activities from previous quarters or years, any significant reversals of revenue, and costs to obtain or fulfill contracts.

In connection with the adoption of these standards, the Company is implementing several new internal controls, including controls to monitor the probability of achievement of contingent milestone payments and the timing and pattern of performance of the performance obligation.

In February 2016, the FASB issued Accounting Standards Update No. 2016-02, Leases ("ASU 2016-02"), which requires 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 is effective for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years. The Company is currently evaluating the potential impact that the adoption of ASU 2016-02 may have on its consolidated financial statements.

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"), which requires an entity to recognize the income tax consequences of an intra-entity transfer of an asset, other than inventory, when the transfer occurs, even though the pre-tax effects of that transaction are eliminated in consolidation. The amendments are effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2017. These amendments should be applied on a modified retrospective basis through a cumulative-effect adjustment directly to retained earnings at the beginning of the period adopted. The Company will adopt ASU 2016-16 in the first quarter of 2018 and the Company estimates that there will be a cumulative-effect increase of approximately $0.4 million to the Company's accumulated deficit.

In November 2016, the FASB issued Accounting Standards Update No. 2016-18, Statement of Cash Flows (Topic 230): Restricted Cash ("ASU 2016-18"). The ASU requires an entity to explain the changes in the total of cash, cash equivalents, restricted cash, and restricted cash equivalents on the statement of cash flows and to provide a reconciliation of the totals in that statement to the related captions in the balance sheet when the cash, cash equivalents, restricted cash, and restricted cash equivalents are presented in more than one line item on the balance sheet. This ASU is effective for annual and interim periods beginning after December 15, 2017, and is required to be adopted using a retrospective approach, with early adoption permitted. The Company is currently evaluating the potential impact that the adoption of ASU 2016-18 may have on its consolidated financial statements.

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

Recently Adopted Accounting Pronouncements

In November 2015, the FASB issued Accounting Standards Update No. 2015-17, Balance Sheet Classification of Deferred Taxes ("ASU 2015-17"), which requires entities to present deferred tax assets and liabilities, along with any related valuation allowance, as noncurrent on the balance sheet. The new standard is effective for annual and interim periods beginning after December 15, 2016. During the three months ended March 31, 2017, the Company elected to adopt ASU 2015-17 on a prospective basis. The adoption of this standard resulted in the reclassification of short-term deferred tax assets to long-term deferred tax assets.

3. PROPERTY AND EQUIPMENT, NET

Property and equipment, net, consists of the following

	December 31,	
	2017	2016
	(in thousands)	
Furniture and equipment	$13,626	$ 7,231
Software	108	43
Leasehold improvements	16,029	1,964
Fixed assets in progress	1,988	1,863
Total	31,751	11,101
Less accumulated depreciation and amortization	(4,417)	(2,494)
Property and equipment, net	$27,334	$ 8,607

Leasehold improvements made during the years ended December 31, 2017 and 2016 consisted of costs related to the Company's leased facilities in Cambridge, Massachusetts and Lexington, Massachusetts.

Depreciation and amortization expense was $2.2 million, $0.8 million and $0.6 million for the years ended December 31, 2017, 2016 and 2015, respectively.

4. ACCRUED EXPENSES AND OTHER CURRENT LIABILITIES

Accrued expenses and other current liabilities consist of the following:

	December 31,	
	2017	2016
	(in thousands)	
Accrued compensation	$5,428	$2,480
Accrued professional fees	3,281	417
Accrued vacation	33	589
Other current liabilities	156	948
Total accrued expenses and other current liabilities	$8,898	$4,434

5. PFIZER COLLABORATION AND SHARE PURCHASE AGREEMENT

On May 5, 2016, the Company entered into a Research, License and Option Agreement (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 the 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 to have 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 receives a non-exclusive, royalty-bearing sublicenseable license to use Pfizer's hepatic targeting technology in any of the Company's own hepatic programs that are outside the scope of the Pfizer Collaboration (the "Wave Programs"). If the Company uses this technology on the Wave Programs, Pfizer is eligible to receive potential development and commercial milestone payments from the Company. Pfizer is also eligible to receive tiered royalties on sales of any products that include Pfizer's hepatic targeting technology.

Pfizer nominated two hepatic targets upon entry into the Pfizer Collaboration in May 2016. In August 2016, Pfizer nominated the third hepatic target under the Pfizer Collaboration for which the Company received a $2.5 million milestone payment in 2016. On November 5, 2017, the Company amended its Pfizer Collaboration Agreement to extend the target nomination period from November 5, 2017 to May 5, 2018. This amendment provides Pfizer with an additional six months to nominate the two remaining hepatic targets under the Pfizer Collaboration Agreement.

The Company has determined that the options held by Pfizer under the Pfizer Collaboration Agreement are substantive and priced at a significant incremental discount. Accordingly, $3.0 million of the upfront payment was allocated to the options to nominate the three remaining targets upon inception. The amount allocated to the three options will be recognized as the research and development services are provided commencing from the date that Pfizer exercises each respective option, or immediately as each option expires unexercised. The portion of the upfront payment allocated to the initial two targets was $7.0 million and will be recognized as the research and development services are provided from the inception of the arrangement. Subsequently, in 2016, Pfizer exercised its option to nominate a third program. The Company will recognize $3.5 million of revenue (which is comprised of $1.0 million allocated to the option at inception of the arrangement and $2.5 million paid by Pfizer at the time of exercising the option) as the research and development services are provided. In November 2017, the Company achieved a milestone under the Pfizer Collaboration Agreement, the revenue related to this milestone was recognized in full during the year ended December 31, 2017.

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.

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.

During the year ended December 31, 2017, the Company recognized revenue of $3.7 million under the Pfizer Collaboration Agreement. Deferred revenue amounted to $8.3 million as of December 31, 2017, of which $2.7 million is included in current liabilities.

6. SHARE CAPITAL

Ordinary Shares

The following represents the historical ordinary share transactions of the Company from December 31, 2013 through December 31, 2017:

- In February 2014, the Company issued 2,263,291 ordinary shares to a third-party investor at $2.47 per share for net proceeds of $5.6 million. In connection with this financing, holders of $9.6 million of related party notes payable agreed to convert such notes into 2,365,139 Series A preferred shares and 1,515,596 ordinary shares.
- In January 2015, the Company issued 4,769,077 ordinary shares to a third-party investor and an existing investor at $2.47 per share for net proceeds of $11.6 million.
- In March 2015, the Company granted 190,856 fully-vested ordinary shares to an executive of the Company.
- In November 2015, the Company completed an initial public offering of its ordinary shares, in which the Company issued and sold 6,375,000 ordinary shares at a price to the public of $16.00 per share. In December 2015, the Company issued an additional 618,126 ordinary shares at a price of $16.00 per share pursuant to a partial exercise of the underwriters' over-allotment option. The aggregate net proceeds to the Company from the initial public offering, inclusive of the over-allotment exercise, were $100.4 million after deducting underwriting discounts and commissions and estimated offering expenses payable by the Company. In connection with this financing, the Company's 5,334,892 Series B preferred shares automatically converted into 5,334,892 of the Company's ordinary shares.
- 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 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 estimated offering expenses.

Features of the Ordinary Shares

The ordinary shares have no par value and there is no concept of authorized share capital under Singapore law. The rights, preferences, and privileges of ordinary shares are as follows:

New Share Offering

Prior to the closing of the Company's initial public offering, any new ordinary shares or securities convertible into ordinary shares were required to be offered in the first instance to all the then holders of any class of shares, other than the Series A preferred shares, prior to issuance and each shareholder had the right of pre-emption with respect to any issuance of new ordinary shares or securities convertible into ordinary shares. This right of pre-emption did not apply to shares sold in the Company's initial public offering and terminated immediately prior to the closing of the Company's initial public offering.

Voting

The holders of ordinary shares are entitled to one vote for each ordinary share held at all meetings of shareholders and written actions in lieu of meetings.

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 $10.00 for Series A preferred shares.

Series A Preferred Shares

The following represent the Series A preferred share transactions of the Company from December 31, 2013 through December 31, 2017:

- In February 2014, holders of $9.6 million of related party notes payable agreed to convert such notes into 2,365,139 Series A preferred shares and 1,515,596 ordinary shares.
- In connection with the private placement of Series B preferred shares on August 14, 2015, holders of the Company's preference shares agreed to rename the existing "preference shares" as "Series A preferred shares." In addition, as further described below, the terms of the Series A preferred shares were amended to remove their right of first refusal and to provide for their right to convert on a one-for-one basis into an aggregate of 3,901,348 ordinary shares at any time at the election of the holder. The rights of the Series A preferred shares are identical to the ordinary shares except that the Series A preferred shares have: (1) no voting rights other than in limited circumstances, (2) the right to a non-cumulative dividend if and when declared by the Company's board of directors and (3) the right to convert the Series A preferred shares at any time on a one-for-one basis into ordinary shares at the discretion of the holder. The Company's shareholders, including holders of Series A preferred shares, entered into an investors' rights agreement and a voting agreement with the Company in connection with the private placement. Pursuant to the terms of the voting agreement, which terminated in connection with the Company's IPO, investors who held at least 1,212,477 shares of registerable securities, including holders of Series A preferred shares and Series B preferred shares, had a right to purchase certain new securities offered by the Company. Additionally, in the event of the sale of 50% or more of the voting power of the Company or a deemed liquidation event, if the holders of at least a majority of the ordinary shares and the holders of 56% of the Series B preferred shares had voted for a sale of the Company, they had the right to force the other shareholders, including the holders of Series A preferred shares, to agree to such a sale.

- In September 2015, the terms of the Series A preferred shares were further amended to provide that, upon the mandatory conversion of Series B preferred shares, which occurred on the completion of the initial public offering, the existing right of Series A preferred shares to a non-cumulative dividend if and when declared by our board of directors ceased and was replaced by a liquidation preference consisting of $0.002 per Series A preferred share, or an aggregate of $10.00 based on the number of Series A preferred shares outstanding at the date of the amendment.

The Company has accounted for the September 2015 amendment to the Series A preferred shares as a modification of the preferred shares based on upon a qualitative assessment of the amendment. The Company has not adjusted the carrying value of the Series A preferred shares since the fair value of the Series A preferred shares immediately prior and subsequent to the modification date resulted in an immaterial change in fair value.

The addition of the liquidation preference to the Series A preferred shares, however, resulted in the reclassification of the Series A preferred shares from permanent shareholders' equity to temporary shareholders' equity since the holders of the Series A preferred shares are entitled to a liquidation preference upon a deemed liquidation event, which is outside the control of the Company. In the event a deemed liquidation event were to occur, the Company would adjust the carrying value of the Series A preferred shares to their liquidation value, which amounts to $10.00 in the aggregate.

The Series A preferred 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.

Series B Preferred Shares Converted in Connection with Initial Public Offering

The following represents the historical Series B preferred share transactions of the Company from January 1, 2015 through the completion of our initial public offering:

- On August 14, 2015, the Company issued an aggregate of 5,334,892 Series B preferred shares at a purchase price of $12.37 per share to certain third-party investors for $62.5 million of net proceeds.
- Upon the completion of the initial public offering on November 16, 2015, all of the outstanding Series B preferred shares of the Company automatically converted into 5,334,892 of the Company's ordinary shares.

Prior to the conversion of the Series B preferred shares into ordinary shares, the Series B preferred shares had a liquidation preference over the Series A preferred shareholders and ordinary shareholders equal to the original per share amount paid of $12.37 per share, plus any declared plus unpaid dividends, if any. Additionally, the holders of Series B preferred shares were entitled to voting rights, however, the Series B preferred shareholders were not entitled to any preferential dividends and their shares were not redeemable.

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 and to 6,064,544 in 2017. 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 and restricted share awards to eligible employees and non-employees of the Company.

As of December 31, 2017, 1,716,110 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)	Aggregate Intrinsic Value (in thousands)(1)
Outstanding as of January 1, 2017	3,577,766	$ 10.58		
Granted	522,750	26.33		
Exercised	(137,493)	6.74		
Forfeited or cancelled	(195,893)	14.71		
Outstanding as of December 31, 2017	3,767,130	$ 12.69	7.81	$ 84,675
Options exercisable as of December 31, 2017	2,257,455	$ 7.64	7.43	$ 62,060
Options unvested as of December 31, 2017	1,509,675	$ 20.23	8.37	$ 22,614

(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 a period of three or 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. Share-based compensation expense related to options is included in research and development expenses or general and administrative expenses on the consolidated statements of operations.

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,		
	2017	2016	2015
Risk-free interest rate	1.49% – 2.23%	1.15% – 2.18%	1.56% - 1.89%
Expected term (in years)	3.00 – 6.25	3.00 – 6.25	5.52 - 6.12
Expected volatility	68.95% – 72.24%	60.89% – 68.76%	62.14% - 71.02%
Expected dividend yield	0%	0%	0%

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

	Year Ended December 31, 2015
Risk-free interest rate	2.06% - 2.35%
Expected term (in years)	9.19 - 10.00
Expected volatility	62.65% - 69.80%
Expected dividend yield	0%

There were no options granted to non-employees in 2017 or 2016.

RSU activity for the years ended December 31, 2017 and 2016 is summarized as follows:

	RSUs	Average Grant Date Fair Value (in dollars per share)
Outstanding as of January 1, 2017	22,750	21.69
Granted	170,859	29.05
Vested	(22,750)	21.69
Forfeited	(16,400)	29.05
RSUs Outstanding at December 31, 2017	154,459	$ 29.05

There were no RSUs granted in 2015. The RSUs granted in 2016 fully vested upon the first anniversary of the grant date and the RSUs granted in 2017 vest annually over a period four years. RSUs that are forfeited are available to be granted again. Share-based compensation expense related to the RSUs is included in research and development expenses or general and administrative expenses on the consolidated statements of operations.

As of December 31, 2017, the unrecognized compensation cost related to outstanding options was $16.9 million for employees and $1.0 million for non-employees. The unrecognized compensation cost related to outstanding options for employees and non-employees is expected to be recognized over a weighted-average period of approximately 2.6 years. For the years ended December 31, 2017 and 2016, the weighted-average grant date fair value per granted option was $16.58 and $30.23, respectively. The aggregate fair value of options that vested during the year ended December 31, 2017 was $11.5 million. The unrecognized compensation costs related to outstanding RSUs was $3.5 million as of December 31, 2017, and is expected to be recognized over a weighted-average period of approximately 3.11 years.

In March 2015, the Company granted 190,856 fully-vested ordinary shares to an executive of the Company and the Company recorded compensation expense in the amount of $0.9 million. Share-based compensation expense related to these fully-vested ordinary shares is included in general and administrative expenses on the consolidated statements of operations.

Share-based compensation expense for the years ended December 31, 2017, 2016 and 2015 is classified in the consolidated statements of operations as follows:

	For the Year Ended December 31,		
	2017	2016	2015
		(in thousands)	
Research and development expenses	$ 7,670	$4,936	$2,268
General and administrative expenses	4,473	1,911	1,756
Total share-based compensation expense	$12,143	$6,847	$4,024

Of the total share-based compensation expense recorded for the years ended December 31, 2017, 2016 and 2015, $2.9 million, $2.7 million and $1.6 million related to options granted to non-employees, respectively, all of which is included in research and development expenses on the consolidated statements of operations.

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. In connection with the lease agreement, the Company issued the lessor a letter of credit in the amount of $2.6 million, which is included in restricted cash at December 31, 2017.

In connection with the lease agreement, the Company is entitled to receive $11.5 million of tenant improvement allowances. The Company has received $3.6 million as of December 31, 2017, which is amortized over the period from the commencement of tenant improvement construction through to the end of the 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. In connection with the lease, the Company issued the lessor a letter of credit in the amount of $1.0 million, which is recorded as restricted cash on the consolidated balance sheets at December 31, 2017 and 2016.

Previously, the Company leased its corporate office space in Boston, Massachusetts under a non-cancellable operating sublease with SNBL, a related party. On September 22, 2015, the Company terminated its sublease with SNBL and exited the premises on October 2, 2015. As a result of the termination of the sublease, the Company recorded approximately $0.2 million of additional depreciation and $0.1 million of exit costs during the year ended December 31, 2015. In connection with the termination, the Company 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, the

Company will make the required payments. The guarantee agreement is effective through August 2019, when the final lease payments are due, and coincides with the original expiration of the lease. The Company simultaneously entered into an indemnification agreement with the sub-lessee to indemnify the Company for any costs incurred under the guarantee made by the Company to SNBL. The maximum amount of the guarantee over the three year and six month sub-lease period is $0.6 million, exclusive of any indemnification from the sub-lessee.

Future minimum lease payments under the Company's non-cancelable operating leases as of December 31, 2017, are as follows:

For the Year Ended December 31,	Amount
	(in thousands)
2018	4,666
2019	5,675
2020	5,846
2021	6,021
2022	6,201
Thereafter	26,163
	54,572

The Company recorded rent expense of $5.6 million, $1.5 million and $0.5 million for the years ended December 31, 2017, 2016 and 2015, respectively.

Capital Lease

In April 2015, the Company entered into a three year lease to acquire laboratory equipment, which has been accounted for as a capital lease. The capital asset was valued at $0.3 million and is included in property and equipment, net, along with accumulated amortization of $0.1 million as of December 31, 2017 and 2016.

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,		
	2017	2016	2015
	(in thousands except share and per share data)		
Numerator:			
Net loss attributable to ordinary shareholders	$ (102,035)	$ (55,401)	$ (19,200)
Denominator:			
Weighted-average ordinary shares outstanding	26,513,382	22,800,628	10,501,455
Net loss per share, basic and diluted	$ (3.85)	$ (2.43)	$ (1.83)

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 December 31,	
	2017	2016
Options to purchase ordinary shares	3,767,130	3,577,766
Restricted share units	154,459	22,750
Series A preferred shares	3,901,348	3,901,348

10. INCOME TAXES

The components of loss before income taxes were as follows:

	Year Ended December 31,		
	2017	2016	2015
		(in thousands)	
Singapore	$ (76,885)	$(53,387)	$(16,534)
Rest of world	(24,442)	(1,398)	(2,622)
Loss before income taxes	$(101,327)	$(54,785)	$(19,156)

During the years ended December 31, 2017, 2016, and 2015, the Company recorded a tax provision of $0.7 million, $0.6 million and less than $0.1 million, respectively. The 2017 tax provision was due to the Company's establishment of a valuation allowance against the Company's U.S. deferred tax assets and U.S. income generated under research and management services arrangements between the Company's U.S. and Singapore entities which is taxed in the U.S. The 2016 and 2015 tax provisions were primarily the result of U.S. income generated under research and management services arrangements between the Company's U.S. and Singapore entities which is taxed in the U.S.

On October 1, 2017, the Company made changes to its corporate entity operating structure, including transferring intellectual property from the Japanese subsidiary to the Singapore parent company, as well as transferring intellectual property from the Singapore parent company to the U.S. and UK subsidiaries, primarily to align the Company's intellectual property holding and management structure with its business functions. The transfer of assets occurred between wholly-owned legal entities within the Wave group that are all based in different tax jurisdictions. As the impact of the transfer was the result of an intra-entity transaction, any resulting gain or loss and immediate tax impact on the transfer is eliminated and not recognized in the consolidated financial statements under U.S. GAAP. The recipient entities will receive a tax benefit associated with the future amortization of the intellectual property received in accordance with the applicable tax laws. As discussed in Note 2, the Company will adopt ASU 2016-16 in the first quarter of 2018 and the Company estimates that there will be a cumulative-effect increase of approximately $0.4 million to the Company's accumulated deficit.

During the years ended December 31, 2017, 2016 and 2015, 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, 2017 and 2016. In April 2017, the Company established a wholly-owned subsidiary in the UK, however, during the year ended December 31, 2017 no income tax benefit was recorded related to the net operating losses incurred in the UK due to uncertainty regarding future taxable income in that jurisdiction.

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, 2017, the Company has accounted for the impacts of the Tax Act to the extent a reasonable estimate could be made. The Company recognized a $0.8 million provisional charge related to the remeasurement of the Company's deferred tax assets and liabilities, which 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 Company will continue to refine its estimates throughout the measurement period or until the accounting is complete as allowed under SAB 118.

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

	Year Ended December 31,		
	2017	2016	2015
	(in thousands)		
Current benefit (provision) for income taxes:			
Singapore taxes	$ 199	$ —	$—
Rest of world taxes	(133)	(1,180)	(8)
Total current benefit (provision) for income taxes	$ 66	$(1,180)	$ (8)
Deferred benefit (provision) for income taxes:			
Singapore taxes	$ —	$ —	$—
Rest of world taxes	(774)	564	(36)
Total deferred benefit (provision) for income taxes	$(774)	$ 564	$(36)
Total benefit (provision) for income taxes	$(708)	$ (616)	$(44)

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

	Year Ended December 31,		
	2017	2016	2015
Singapore statutory income tax rate	17.0%	17.0%	17.0%
Federal and state tax credits	5.7	3.1	2.3
Permanent differences	(2.6)	(0.9)	5.5
Changes in reserves for uncertain tax positions	(3.5)	(3.6)	(1.2)
Foreign rate differential	2.8	(0.1)	1.2
Tax rate change	(0.9)	—	—
Other	0.5	(0.9)	0.2
Change in deferred tax asset valuation allowance	(19.7)	(15.7)	(25.2)
Effective income tax rate	(0.7)%	(1.1)%	(0.2)%

The components of the Company's deferred tax assets as of December 31, 2017 and 2016 are as follows:

	December 31,	
	2017	2016
	(in thousands)	
Deferred tax assets:		
Net operating loss carryforwards	$ 28,913	$ 16,046
Federal and state tax credits	4,522	449
Accrued expenses	1,903	242
Share-based compensation	1,921	1,024
Other	176	102
Total deferred tax assets	37,435	17,863
Valuation allowance	(36,069)	(15,999)
Net deferred tax assets	1,366	1,864
Deferred tax liabilities:		
Depreciation	(1,366)	(1,090)
Total deferred tax liabilities	(1,366)	(1,090)
Net deferred tax assets (liabilities)	$ —	$ 774

A roll-forward of the valuation allowance for the years ended December 31, 2017 and 2016 is as follows:

	Year Ended December 31,	
	2017	2016
	(in thousands)	
Balance at beginning of year	$ 15,999	$ 7,466
Increase in valuation allowance	20,595	8,774
Reversal of valuation allowance	(598)	(282)
Effect of foreign currency translation	73	41
Balance at end of year	$ 36,069	$ 15,999

As of December 31, 2017 and 2016, the Company has U.S. federal research and development tax credit carryforwards of approximately $2.8 million and $0.2 million, respectively, available to offset future U.S. federal income taxes. As of December 31, 2017 and 2016, the Company has state research and development tax credit carryforwards of approximately $1.1 million and $0.3 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 2032. As of December 31, 2017, the Company had a U.S. orphan drug credit carryforward of $0.4 million, which will begin to expire in 2037.

As of December 31, 2017 and 2016, the Company has net operating loss carryforwards in Japan of $4.1 million and $5.3 million, respectively, which may be available to offset future income tax liabilities and begin to expire in 2021.

As of December 31, 2017 and 2016, the Company has net operating loss carryforwards in Singapore of $149.2 million and $84.0 million, respectively, which may be available to offset future income tax liabilities and can be carried forward indefinitely.

As of December 31, 2017, the Company has net operating loss carryforwards in the UK of $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, 2016, management has considered the Company's history of cumulative net losses incurred since inception and its lack of commercialization of any products or generation of any revenue from product sales since inception and has concluded that it is more likely than not that the Company will not realize the benefits of the deferred tax assets in Japan and Singapore. Accordingly, a full valuation allowance has been established against those deferred tax assets as of December 31, 2016. Additionally as of December 31, 2016, management has considered the Company's expected utilization of U.S. research and development credit carryforwards and has concluded that it is more likely than not that the Company will not realize the benefits of the U.S. state research and development tax credit carryforward. As of December 31, 2016, there was a $0.8 million deferred tax asset in the U.S. As of December 31, 2017, 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, as well as the corporate entity restructuring, and has concluded that it is more likely than not that the Company will not realize the benefits of the deferred tax assets in Singapore, the U.S., Japan and the UK. Accordingly, a full valuation allowance has been established against those deferred tax assets as of December 31, 2017.

The valuation allowance increased by approximately $20.1 million in 2017, $8.5 million in 2016 and $4.8 million in 2015 primarily as a result of operating losses generated with no corresponding financial statement benefit. The Company may release this valuation allowance when management determines that it is more-likely-than-not that the deferred tax assets will be realized. Any release of valuation allowance will be recorded as a tax benefit 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:

	2017	2016	2015
		(in thousands)	
Unrecognized tax benefit at the beginning of the year	$2,343	$ 1,280	$1,025
Tax positions released related to prior years	—	(1,066)	—
Tax positions related to the current year	3,864	2,129	255
Unrecognized tax benefit at the end of the year	$6,207	$ 2,343	$1,280

As of December 31, 2017, 2016 and 2015, the total amount of gross unrecognized tax benefits, which excludes interest and penalties, was $6.2 million, $2.3 million and $1.3 million, respectively. At December 31, 2017, $4.2 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, 2017 and 2016, the Company had incurred less than $0.1 million and zero, respectively, 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 taxing authorities in the U.S., Japan, and Singapore. There are currently no pending income tax examinations. Tax years from 2012 to the present are still open to examination in the U.S., from 2008 to the present in Japan, and from 2012 to the present in Singapore. 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, 2017 and 2016, $48.8 million and $1.7 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 U.S. 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 2015, 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 research and development credit carryforwards to offset future tax liabilities. Should an ownership change have occurred after December 31, 2015 or occur in the future, the Company’s ability to utilize 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 all U.S.-based employees. 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 $0.4 million in the year ended December 31, 2017. The Company did not make contributions to the 401(k) Plan during the years ended December 31, 2016 or 2015.

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 and 2016.
- Pursuant to the terms of various service agreements with SNBL, the Company paid SNBL $0.5 million, $0.4 million and $0.1 million for the years ended December 31, 2017, 2016 and 2015, respectively, for contract research services provided to the Company and its affiliates.
- 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. GEOGRAPHIC DATA

The Company's long-lived assets consist of property and equipment, net, and are located in the following geographical areas:

	December 31, 2017	December 31, 2016
	(in thousands)	
Japan	$ 14	$ 136
United States	27,320	8,471
Total long-lived assets	$ 27,334	$ 8,607

14. SELECTED QUARTERLY FINANCIAL INFORMATION (UNAUDITED)

Selected quarterly results from operations for the years ended December 31, 2017 and 2016 are as follows:

	2017 Quarter Ended			
	March 31	June 30	September 30	December 31
	(in thousands, except for per share data)			
Revenues	$ 676	$ 676	$ 676	$ 1,676
Operating expenses	20,590	25,770	27,668	32,256
Loss from operations	(19,914)	(25,094)	(26,992)	(30,580)
Net loss	(20,996)	(24,693)	(26,135)	(30,211)
Basic and diluted net loss per ordinary share	$ (0.89)	$ (0.92)	$ (0.94)	$ (1.09)

	2016 Quarter Ended			
	March 31	June 30	September 30	December 31
	(in thousands, except for per share data)			
Revenues	$ —	$ 417	$ 392	$ 676
Operating expenses	7,952	12,055	17,625	19,180
Loss from operations	(7,952)	(11,638)	(17,233)	(18,504)
Net loss	(7,847)	(11,565)	(17,535)	(18,454)
Basic and diluted net loss per ordinary share	$ (0.36)	$ (0.51)	$ (0.75)	$ (0.79)

15. SUBSEQUENT EVENTS

Takeda Collaboration and License Agreement

In February 2018, two of the Company's subsidiaries entered into a global strategic collaboration (the "Takeda Collaboration") that provides Takeda Pharmaceutical Company Limited ("Takeda") with the option to co-develop and co-commercialize the Company's CNS development programs in Huntington's disease, amyotrophic lateral sclerosis and frontotemporal dementia, as well as a discovery stage program targeting ATXN3 for the treatment of spinocerebellar ataxia type 3. In addition, Takeda has the right to license multiple preclinical programs for CNS indications including Alzheimer's disease and Parkinson's disease. Subject to customary closing conditions, including the expiration or early termination of the applicable waiting period under the Hart-Scott-Rodino Antitrust Improvements Act of 1976 (the "HSR Act"), the Takeda Collaboration is expected to become effective during the first quarter of 2018.

Simultaneously with the Company's entry into the Takeda Collaboration Agreement, the Company entered into a share purchase agreement with Takeda pursuant to which the Company agreed to sell to Takeda 1,096,892 of its ordinary shares at a purchase price of $54.70 per share, for an aggregate purchase price of approximately $60.0 million (the "Takeda Equity Investment"). Subject to customary closing conditions, including the expiration or early termination of the applicable waiting period under the HSR Act, the Takeda Equity Investment is expected to close during the first quarter of 2018.

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

The Board of Directors
Wave Life Sciences Ltd.:

We consent to the incorporation by reference in the registration statements (No. 333-208598 and No. 333-221480) on Form S-8 and (No. 333-215428) on Form S-3, as amended, of Wave Life Sciences Ltd., of our report dated March 12, 2018, with respect to the consolidated balance sheets of Wave Life Sciences Ltd. as of December 31, 2017 and 2016 and the related consolidated statements of operations, comprehensive loss, Series A preferred shares and shareholders' equity and cash flows for each of the years in the three-year period ended December 31, 2017, and the related notes (collectively, the "consolidated financial statements"), which report appears in Amendment No. 2 to Annual Report on Form 10-K/A for the fiscal year ended December 31, 2017 of Wave Life Sciences Ltd. filed on May 9, 2018.

/s/ KPMG LLP

Cambridge, Massachusetts
May 9, 2018

Exhibit 31.1

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

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

1. I have reviewed this Amendment No. 2 to Annual Report on Form 10-K/A of Wave Life Sciences Ltd.

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report.

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report.

Date: May 9, 2018

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

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

Exhibit 31.2

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

I, Keith C. Regnante, certify that:

1. I have reviewed this Amendment No. 2 to Annual Report on Form 10-K/A of Wave Life Sciences Ltd.

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report.

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report.

Date: May 9, 2018

/s/ Keith C. Regnante

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

Exhibit 32

WAVE LIFE SCIENCES LTD.
CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with this Amendment No. 2 to Annual Report of Wave Life Sciences Ltd. (the "Company") on Form 10-K/A for the fiscal year ended December 31, 2017, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each of the undersigned officers of the Company hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of such officer's knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

May 9, 2018

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

May 9, 2018

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

This certification accompanies the Form 10-K/A to which it relates is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of Wave Life Sciences Ltd. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Form 10-K/A), irrespective of any general incorporation language contained in such filing.