UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT
Pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934

Date of report (Date of earliest event reported): May 10, 2017

WAVE LIFE SCIENCES LTD.

(Exact name of registrant as specified in its charter)

Singapore (State or other jurisdiction of incorporation) 001-37627 (Commission File Number) Not Applicable (IRS Employer Identification No.)

8 Cross Street #10-00, PWC Building Singapore 048424 (Address of principal executive offices)

revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

048424 (Zip Code)

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

	ck the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following visions (see General Instruction A.2. below):					
	Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)					
	Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)					
	Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))					
	Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))					
	ndicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) r Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).					
Ξme	erging 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

Item 2.02 Results of Operations and Financial Condition.

On May 10, 2017, WAVE Life Sciences Ltd. (the "Company") announced its financial results for the quarter ended March 31, 2017. The full text of the press release issued in connection with the announcement is furnished as Exhibit 99.1 to this Current Report on Form 8-K and is incorporated by reference herein.

The information in this Current Report on Form 8-K, including Exhibit 99.1 attached hereto, is intended to be furnished and shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as expressly set forth by specific reference in such filing.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

The following exhibit relating to Item 2.02 of this Current Report on Form 8-K shall be deemed to be furnished and not filed:

Exhibit	
No.	<u>Description</u>
99.1	Press release issued on May 10, 2017

SIGNATURE

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

WAVE LIFE SCIENCES LTD.

Date: May 10, 2017 /s/ Keith C. Regnante

Keith C. Regnante Chief Financial Officer



WAVE Life Sciences Reports First Quarter 2017 Financial Results and Provides Business Update

CAMBRIDGE, Mass., May 10, 2017 – WAVE Life Sciences Ltd. (NASDAQ: WVE), a genetic medicines company focused on developing targeted therapies for patients impacted by rare diseases, today announced financial results for the first quarter ended March 31, 2017.

"The beginning of 2017 was marked by continued advancement of our lead programs in HD and DMD and substantial progress in our collaboration with Pfizer. Our two HD programs and our DMD program remain on track to enter the clinic in 2017, and we will announce our next three pipeline candidates later this year," said Paul Bolno, M.D., MBA, President and Chief Executive Officer of WAVE Life Sciences. "We have also made significant advancements within our discovery platform, deepening our knowledge and capabilities in both existing (antisense and exon skipping) and new (ssRNAi and splicing) modalities, and we are exploring new approaches to identify and target specific cell populations as we look ahead to our next set of pipeline candidates."

First Quarter Business Update

· Lead programs and pipeline expansion on track in 2017

WAVE's two lead programs in Huntington's disease ("HD") and one lead program in Duchenne muscular dystrophy ("DMD") are on track to advance into clinical trials in 2017. In HD, WVE-120101 and WVE-120102 are expected to enter the clinic in mid-2017. In DMD, WVE-210201 is expected to enter the clinic in the second half of 2017. In addition, WAVE intends to select an additional three program candidates in 2017 and is on track to deliver six development programs by the end of 2018.

Manufacturing facility development underway

In 2016, WAVE entered into a lease agreement for a manufacturing facility of approximately 90,000 square feet in Lexington, MA. WAVE continued its substantial progress with the build-out during the first quarter, and the company plans to occupy the facility by the end of the second quarter. The facility will provide WAVE with current good manufacturing practice ("cGMP") capabilities and increase the company's control and visibility of its drug product supply chain.

Investment in broad manufacturing capabilities is intended to grant WAVE and its current and future partners greater independence and flexibility in bringing multiple products to market. The company expects its internal expertise in cGMP manufacturing will support growth of clinical drug product for its current and future development activities and could support commercial-scale manufacturing.

Accessing new tissue areas and cells with expanding discovery platform

Intrathecal administration of WAVE's compounds in non-human primates demonstrated broad distribution in the central nervous system ("CNS"). As WAVE's portfolio of programs expands into additional neurological disorders, WAVE is exploring the ability to target specific cell-types and regions (i.e. astrocytes, microglia, spinal motor neurons) of the CNS using chemical modifications, while also characterizing cellular uptake and intracellular trafficking relevant to antisense, RNAi and splicing modalities. For example, in Q4 2016, WAVE entered into a collaboration with nLife Therapeutics, to access their conjugate chemistry platform and support some of WAVE's enhanced discovery efforts. Additionally, WAVE continues to explore therapeutic areas outside of neurology, including liver, eye and skin, with external collaborators. In these areas, WAVE has demonstrated productive distribution in-vivo to key cell types in the liver (hepatocytes via GalNAc conjugation), in the eye (RPE and the trabecular meshwork via intravitreal and intracamaral injections), and in the skin (suprabasal layer keratinocytes (topical)).

• \$100mm financing completed in April to support manufacturing and platform development

In April 2017, WAVE raised \$100.0 million in gross proceeds in its first follow-on public offering. With these additional proceeds, WAVE is well positioned to support its continued investment in manufacturing independence with the potential for full-scale commercial readiness, and to pursue its previously stated goal of delivering six development programs by the end of 2018. In furtherance of these objectives, WAVE is focused on advancing the additional three programs to be named later this year, and continuing to invest in its platform to drive the discovery and advancement of future therapeutic candidates.

First Quarter 2017 Financial Results and Financial Guidance

WAVE reported a net loss of \$21.0 million for the first quarter of 2017 as compared to a net loss of \$7.8 million for the first quarter of 2016. The increase in net loss for the first quarter was mainly due to increased research, discovery and development expenses as well as increased salary and benefits expenses as WAVE continues to attract key talent and grow its organization to support its corporate goals.

Research and development expenses were \$14.7 million for the first quarter of 2017 as compared to \$4.7 million for the same period in 2016. The increase in research and development expenses year-over-year was largely due to increases in supplies and services expenses, related to the continued development of WAVE's three lead programs as well as its discovery and platform activities, along with increases in its salary and benefits expenses, due to the increase in headcount.

General and administrative expenses were \$5.9 million for the first quarter of 2017 as compared to \$3.2 million for the same period in the 2016. The increase in general and administrative expenses year-over-year was driven by increases in salary and benefits expenses, due to an increase in headcount, as well as increases in other general and administrative expenses.

As of March 31, 2017, which was prior to the closing of the follow-on offering discussed above, WAVE had cash and cash equivalents totaling \$129.5 million as compared to \$150.3 million as of December 31, 2016. The decrease in cash and cash equivalents was primarily the result of WAVE's first quarter net loss.

WAVE expects that the cash and cash equivalents available as of March 31, 2017 along with the net proceeds from the April 2017 public offering, together with anticipated milestone payments under its existing collaboration with Pfizer, will be sufficient to fund its operating expenses and capital expenditure requirements into mid-2019.

About WAVE Life Sciences

At WAVE Life Sciences, we are driven by an unwavering passion and commitment to deliver on our mission of confronting challenging diseases by developing transformational therapies and empowering patients. We are utilizing our innovative and proprietary synthetic chemistry drug development platform to design, develop and commercialize rationally redesigned nucleic acid therapeutics that precisely target the underlying cause of rare and other serious genetically defined diseases. Given the versatility of our chemistry platform, WAVE's deep, diverse pipeline spans multiple modalities including antisense, exon-skipping, and single-stranded RNAi. For more information, please visit www.wavelifesciences.com.

Forward Looking Information

This press release contains forward-looking statements concerning our goals, beliefs, expectations, strategies, objectives and plans, and other statements that are not necessarily based on historical facts, including statements regarding the following: the anticipated commencement of our clinical trials; the design and anticipated goals of our clinical trials; the future performance and results of our programs in clinical trials; the progress and potential benefits of our collaborations with partners; our identification of future candidates and their therapeutic potential; the anticipated therapeutic benefits of our therapies compared to other therapies; our advancing of therapies across multiple modalities and the anticipated benefits of that strategy; the anticipated timing and benefits of our internal manufacturing facility that we are building; our future growth; the potential of our stereochemistry, our drug discovery platform and nucleic acid therapeutics generally; our anticipated use of proceeds from our April 2017 follow-on public offering; and the anticipated duration of our cash runway. Actual results may differ materially from those indicated by these forward-looking statements as a result of various important factors, including the following: the ability of our preclinical programs to produce data sufficient to support our clinical trial applications and the timing thereof; our ability to continue to build and maintain the company infrastructure and personnel needed to achieve our goals; the clinical results of our programs, which may not support further development of product candidates; actions of regulatory agencies, which may affect the initiation, timing and progress of clinical trials; our effectiveness in managing future clinical trials and regulatory processes; the success of our platform in identifying viable candidates; the continued development and acceptance of nucleic acid therapeutics as a class of drugs; our ability to demonstrate the therapeutic benefits of our candidates in clinica

modalities; our ability to obtain, maintain and protect intellectual property; our ability to enforce our patents against infringers and defend our patent portfolio against challenges from third parties; our ability to finance our drug discovery efforts and to raise additional capital when needed; and competition from others developing therapies for similar uses, as well as the information under the caption "Risk Factors" contained in our most recent Annual Report on Form 10-K filed with the Securities and Exchange Commission (SEC) and in other filings we make with the SEC from time to time. We undertake no obligation to update the information contained in this press release to reflect subsequently occurring events or circumstances.

Media and Investor Contact:

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WAVE LIFE SCIENCES LTD. UNAUDITED CONSOLIDATED BALANCE SHEETS

(In thousands, except share amounts)

	March 31, 2017		December 31, 2016	
Assets				
Current assets:				
Cash and cash equivalents	\$	129,484	\$	150,293
Prepaid expenses and other current assets		3,296		1,483
Deferred tax assets				214
Total current assets		132,780		151,990
Property and equipment, net		14,296		8,607
Deferred tax assets		774		560
Restricted cash		3,604		3,601
Other assets		53		53
Total assets	\$	151,507	\$	164,811
Liabilities, Series A preferred shares and shareholders' equity	_			
Current liabilities:				
Accounts payable	\$	7,397	\$	4,943
Accrued expenses and other current liabilities		3,789		4,434
Current portion of capital lease obligation		62		62
Current portion of deferred revenue		2,705		2,705
Current portion of lease incentive obligation		117		11
Total current liabilities		14,070		12,155
Long-term liabilities:				
Capital lease obligation, net of current portion		_		16
Deferred rent		1,711		680
Deferred revenue, net of current portion		7,635		8,311
Lease incentive obligation, net of current portion		1,075		116
Other liabilities		2,055		796
Total long-term liabilities		12,476		9,919
Total liabilities	\$	26,546	\$	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; 23,551,069 and 23,502,169 shares issued and outstanding at March 31, 2017				
and December 31, 2016, respectively		215,808		215,602
Additional paid-in capital		13,028		10,029
Accumulated other comprehensive loss		(276)		(291)
Accumulated deficit		(111,473)		(90,477)
Total shareholders' equity		117,087		134,863
Total liabilities, Series A preferred shares and shareholders' equity	\$	151,507	\$	164,811

WAVE LIFE SCIENCES LTD. UNAUDITED CONSOLIDATED STATEMENTS OF OPERATIONS

(In thousands, except share and per share amounts)

	Three Months Ended March 31,			
	2017		2016	
Revenue	\$	676	\$	
Operating expenses:				
Research and development		14,740		4,736
General and administrative		5,850		3,216
Total operating expenses		20,590		7,952
Loss from operations		(19,914)		(7,952)
Other income (expense), net:				
Dividend income		290		_
Interest income (expense), net		3		104
Other income (expense), net		(72)		(4)
Total other income (expense), net		221		100
Loss before income tax benefit (provision)		(19,693)		(7,852)
Income tax benefit (provision)		(1,303)		5
Net loss	\$ ((20,996)	\$	(7,847)
Net loss per share attributable to ordinary shareholders—basic and diluted	\$	(0.89)	\$	(0.36)
Weighted-average ordinary shares used in computing net loss per share attributable to ordinary shareholders—				
basic and diluted	23,5	31,788	21,	,551,423