UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-8 REGISTRATION STATEMENT

UNDER
THE SECURITIES ACT OF 1933

Wave Life Sciences Ltd.

(Exact name of registrant as specified in its charter)

Singapore
(State or other jurisdiction of incorporation or organization)

Not Applicable (I.R.S. Employer Identification No.)

8 Cross Street #10-00
PWC Building
Singapore 048424
+65 6236 3388
(Address of Principal Executive Offices)

Not Applicable (Zip Code)

Wave Life Sciences Ltd. 2014 Equity Incentive Plan, as amended (Full title of the plan)

CT Corporation 155 Federal Street, Suite 700 Boston, MA 02110 (617) 757-6400

(Name, address and telephone number, including area code, of agent for service)

Copies to:

William C. Hicks, Esq.
Pamela B. Greene, Esq.
John P. Condon, Esq.
Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.
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Boston, MA 02111
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Ι

Linda Rockett, Esq. General Counsel Wave Life Sciences Ltd. c/o 733 Concord Avenue Cambridge, MA 02138 (617) 949-2900

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

Large accelerated filer □ Accelerated filer □ 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 7(a)(2)(B) of the Securities Act.

CALCULATION OF REGISTRATION FEE

	Amount	Proposed Maximum	Proposed Maximum			
			Maxilliulli			
Title of securities	to be	Offering Price	Aggregate	Amount of		
to be registered	Registered (1)	per Share (2)	Offering Price (2)	Registration Fee		
Ordinary Shares, no par value per share	1,000,000 shares (3)	\$22.85	\$22,850,000	\$2,844.83		

- (1) Pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement shall also cover any additional Ordinary Shares of the Registrant ("Ordinary Shares") that become issuable under the Wave Life Sciences Ltd. 2014 Equity Incentive Plan, as amended (the "2014 Plan"), by reason of any share dividend, share split, recapitalization or other similar transaction effected without receipt of consideration that increases the number of the Registrant's outstanding Ordinary Shares.
- (2) Estimated solely for the purpose of calculating the amount of the registration fee pursuant to Rule 457(h) and Rule 457(c) under the Securities Act. The offering price per share and the aggregate offering price are based upon the average of the high and low prices of the Ordinary Shares as reported on the NASDAQ Global Market on November 3, 2017.
- (3) Consists of an increase of 1,000,000 Ordinary Shares reserved for issuance under the 2014 Plan approved by the Registrant's shareholders at the 2017 Annual General Meeting of Shareholders on August 10, 2017.

EXPLANATORY NOTE

This Registration Statement registers 1,000,000 additional Ordinary Shares of the Registrant (the "Ordinary Shares") reserved for issuance under the Wave Life Sciences Ltd. 2014 Equity Incentive Plan, as amended (the "2014 Plan"), by the Registrant's shareholders at the 2017 Annual General Meeting of Shareholders on August 10, 2017. This Registration Statement registers additional securities of the same class as other securities for which a registration statement filed on Form S-8 of the Registrant relating to an employee benefit plan is effective (File No. 333-208598). The information contained in the Registrant's registration statement on Form S-8 (File No. 333-208598), except for Item 8 "Exhibits," is hereby incorporated by reference pursuant to General Instruction E of Form S-8.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

ITEM 8. EXHIBITS.

Evhibit

Number	<u>Description</u>
4.1*	Constitution (formerly known as Memorandum of Association and Articles of Association).
4.2**	Form of Specimen Ordinary Share Certificate.
4.3***	Investors' Rights Agreement by and among the Registrant and certain of its shareholders, dated as of August 14, 2015.
4.4***	Share Purchase Agreement by and between the Registrant and C.P. Pharmaceuticals International C.V., dated as of May 5, 2016.
5.1	Opinion of WongPartnership LLP.
23.1	Consent of KPMG LLP, independent registered public accounting firm.
23.2	Consent of WongPartnership LLP (included in Exhibit 5.1).
24.1	Powers of Attorney (included on the signature page to this Registration Statement).
99.1@+	Wave Life Sciences Ltd. 2014 Equity Incentive Plan, as amended.
99.2@++	Form of Non-qualified Share Option Agreement under the 2014 Equity Incentive Plan, as amended.
99.3@+++	Form of Incentive Share Option Agreement under the 2014 Equity Incentive Plan, as amended.
99.4@++++	Form of Restricted Share Unit Agreement under the 2014 Equity Incentive Plan, as amended.
99.5@++++	Form of Non-qualified Share Option Agreement for UK Participants under the 2014 Equity Incentive Plan, as amended.

Previously filed as Exhibit 3.2 to Amendment No. 5 to the Registrant's Registration Statement on Form S-1 (File No. 333-207379), filed with the Securities and Exchange Commission (the "Commission") on November 10, 2015 and incorporated herein by reference.

- ** Previously filed as Exhibit 4.1 to Amendment No. 3 to the Registrant's Registration Statement on Form S-1 (File No. 333-207379), filed with the Commission on November 6, 2015 and incorporated herein by reference.
- *** Previously filed as Exhibit 4.2 to the Registrant's Registration Statement on Form S-1 (File No. 333-207379), filed with the Commission on October 9, 2015 and incorporated herein by reference.
- **** Previously filed as Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q (File No. 001-37627), filed with the Commission on August 15, 2016 and incorporated herein by reference. Confidential treatment has been granted with respect to certain portions of this exhibit. Omitted portions have been filed separately with the Commission.
- + Previously filed as Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q (File No. 001-37627), filed with the Commission on November 9, 2017 and incorporated herein by reference.
- ++ Previously filed as Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q (File No. 001-37627), filed with the Commission on November 9, 2017 and incorporated herein by reference.
- +++ Previously filed as Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q (File No. 001-37627), filed with the Commission on November 9, 2017 and incorporated herein by reference.
- ++++ Previously filed as Exhibit 10.4 to the Registrant's Quarterly Report on Form 10-Q (File No. 001-37627), filed with the Commission on November 9, 2017 and incorporated herein by reference.
- +++++ Previously filed as Exhibit 10.5 to the Registrant's Quarterly Report on Form 10-Q (File No. 001-37627), filed with the Commission on November 9, 2017 and incorporated herein by reference.
- @ Management contract or compensatory plan.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Cambridge, Massachusetts, on November 9, 2017.

Wave Life Sciences Ltd.

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

Paul B. Bolno, M.D.

President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Paul B. Bolno, M.D. and Keith C. Regnante, and each of them, as his true and lawful attorneys-in-fact and agents, each with the full power of substitution, for him and in his name, place or stead, in any and all capacities, to sign any and all amendments to this Registration Statement (including post-effective amendments), and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or their or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date	
/s/ Paul B. Bolno, M.D. Paul B. Bolno, M.D.	President, Chief Executive Officer and Director (Principal Executive Officer)	November 9, 2017	
/s/ Keith C. Regnante Keith C. Regnante	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	November 9, 2017	
/s/ Christian Henry Christian Henry	Chairman of the Board	November 9, 2017	
/s/ Peter Kolchinsky, Ph.D. Peter Kolchinsky, Ph.D.	Director	November 9, 2017	
/s/ Koji Miura Koji Miura	Director	November 9, 2017	
/s/ Adrian Rawcliffe Adrian Rawcliffe	Director	November 9, 2017	
/s/ Ken Takanashi Ken Takanashi	Director	November 9, 2017	
/s/ Gregory L. Verdine, Ph.D. Gregory L. Verdine, Ph.D.	Director	November 9, 2017	



Date: 9 November 2017

The Board of Directors WAVE Life Sciences Ltd. c/o 733 Concord Avenue Cambridge, MA 02138 United States of America WongPartnership LLP 12 Marina Boulevard Level 28 Marina Bay Financial Centre Tower 3 Singapore 018982 T +65 6416 8000 wongpartnership.com

ASEAN | CHINA | MIDDLE EAST

FROM

GSO/KY/20160703

f: +65 6532 5711 Not for service of court documents Not for urgent correspondence d:+65 6416 8205 / +65 6416 2482

e: gail.ong@wongpartnership.com

karen.yeoh@wongpartnership.com

Dear Sirs

WAVE LIFE SCIENCES LTD. (THE "COMPANY") – REGISTRATION STATEMENT ON FORM S-8 IN RESPECT OF THE 1,000,000 2014 PLAN SHARES (AS DEFINED BELOW)

A. Introduction

- 1. We have acted as legal advisers to the Company, a company incorporated under the laws of the Republic of Singapore, as to Singapore law in connection with the filing by the Company with the United States Securities and Exchange Commission (the "Commission") of a registration statement on Form S-8 (the "Registration Statement") under the Securities Act of 1933, as amended (the "Securities Act"), in respect of 1,000,000 additional ordinary shares of the Company (the "2014 Plan Shares") reserved for issuance under the WAVE Life Sciences Ltd. 2014 Equity Incentive Plan, as amended (the "2014 Plan").
- 2. We do not express nor imply any opinion with respect to the effect of any law other than the laws of Singapore as of the date of this opinion, and have made no investigation of, and do not express or imply views of, any other laws which may be relevant to the documents submitted to us or opinions given by us, nor do we express or imply any opinion on matters relating to tax. This opinion is to be governed by and construed in accordance with the laws of Singapore as applied by the courts of Singapore as of the date of this opinion. All references to the laws of the Republic of Singapore or a specific law of the Republic of Singapore in this opinion are references to the laws of the Republic of Singapore as of the date of this opinion. We are not obliged to update this opinion to reflect, or notify any addressee of this opinion or any other person of, any legal or legislative developments, or other changes to law or fact, arising after the date of this opinion. We have taken instructions solely from the Company.
- 3. In respect of the 2014 Plan and the 2014 Plan Shares, we have assumed due compliance with all matters concerning the laws of the United States of America and all other relevant jurisdictions (other than in Singapore in respect of the matters set out in paragraph 7 of this opinion).



 $Wong Partnership\ LLP\ (UEN:\ T08LL0003B)\ is\ a\ limited\ liability\ law\ partnership\ registered\ in\ Singapore\ under\ the\ Limited\ Liability\ Partnerships\ Act\ (Chapter\ 163A).$

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B. Documents

- 4. In rendering the opinions set out below, we have examined:
 - 4.1. an electronic copy (in Adobe Acrobat form) of the certificate of incorporation of the Company dated 24 July 2012 issued by the Accounting and Corporate Regulatory Authority of Singapore ("<u>ACRA</u>");
 - 4.2. an electronic copy (in Adobe Acrobat form) of the certificate confirming incorporation upon conversion of the Company dated 6 November 2015 issued by ACRA confirming the Company's conversion to a public company;
 - 4.3. an electronic copy (in Adobe Acrobat form) of the constitution of the Company, as amended on 9 November 2015 (the "Constitutive Documents");
 - 4.4. electronic copies (in Adobe Acrobat form) of the minutes of a meeting of the Board of Directors of the Company held on 10 December 2014 and resolutions in writing of the Board of Directors of the Company dated 14 August 2015, 28 October 2015, and 5 July 2017 (collectively, the "Board Resolutions");
 - 4.5. electronic copies (in Adobe Acrobat form) of the resolutions in writing of the shareholders of the Company on 12 January 2015, 14 August 2015, and 1 November 2015 and the minutes dated 21 August 2017 of the annual general meeting of the Company held on 10 August 2017 (collectively, the "Shareholders' Resolutions" and together with the Board Resolutions, the "Resolutions");
 - 4.6. an electronic copy (in Adobe Acrobat form) of the 2014 Plan appended to the definitive proxy statement pursuant to Section 14(a) of the Securities Exchange Act of 1934, as amended, filed by the Company with the Commission on 6 July 2017;
 - 4.7. an electronic copy (in Adobe Acrobat form) of the Registration Statement; and
 - 4.8. such other documents as we may have considered necessary or desirable to examine in order that we may render this opinion.
- 5. This opinion is being rendered to you in connection with the filing of the Registration Statement. Except as expressly provided in paragraph 7 of this opinion, we express no opinion whatsoever with respect to any document described in paragraph 4 herein.

C. Assumptions

- 6. We have assumed (without enquiry and with your consent):
 - 6.1. the genuineness of all signatures on all documents and that each such signature is that of a person duly authorised to affix the same and execute the relevant documents, the authenticity of all documents submitted and made available to us as originals, and the completeness, and the conformity to original documents, of all copies submitted to us;
 - 6.2. that each of the documents submitted to us for examination and referred to in paragraph 4 above is a true, complete and up-to-date copy and has not been revoked, amended or superseded, and all representations, warranties and factual statements contained therein are true and correct;

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- 6.3. that the Resolutions were:
 - (a) duly passed at properly convened meetings of duly appointed directors or the shareholders of the Company, or as the case may be, duly passed in the form of circulating resolutions in writing, in accordance with the provisions of the Constitutive Documents; and
 - (b) duly passed in accordance with the provisions of the Companies Act, Chapter 50 of Singapore (the "Companies Act");
- 6.4. that the copy of the 2014 Share Plan appended to the definitive proxy statement pursuant to Section 14(a) of the Securities Exchange Act of 1934, as amended, filed by the Company with the Commission on 6 July 2017, is true, complete and up-to-date, and has not been revoked, rescinded, superseded or amended and is in full force and effect and no other resolution or other action has been taken which could affect the validity of the 2014 Share Plan;
- 6.5. that the approvals conferred by the copies of the Resolutions submitted to us have not been revoked, rescinded, superseded or amended and are in full force and effect, and that no other resolution or other action has been passed or taken which could affect the validity of any or all of the Resolutions;
- 6.6. that the directors of the Company:
 - (a) have been duly appointed in accordance with the provisions of the Companies Act and the constitution of the Company in force at that time;
 - (b) have acted and will act in good faith and in the best interests of the Company in approving the preparation, execution and filing of the Registration Statement with the Commission, the entry into the transactions contemplated in the 2014 Plan (including, but without limitation, the grant of individual awards and issuance of the 2014 Plan Shares), and without intention to defraud any of the creditors of the Company; and
 - (c) have each disclosed and will disclose any interest which he may have in the 2014 Plan and the 2014 Plan Shares in accordance with the provisions of the Companies Act and the Constitutive Documents and except as disclosed, none of the directors of the Company has or will have any interest in such transactions except to the extent permitted by the Companies Act and the Constitutive Documents;
- 6.7. that all relevant documents have been provided to us by the officers of the Company for inspection for the purposes of this opinion;
- 6.8. that the individual grants, purchases and issuances under the 2014 Plan are duly authorised by all necessary corporate actions of the Company;
- 6.9. that the individual grants, purchases and issuances are made under the 2014 Plan and the 2014 Plan Shares are duly issued in accordance with the requirements of applicable law (other than the laws of the Republic of Singapore in respect of the opinions in paragraph 7), the rules of the 2014 Plan and the individual grants, and in compliance with Section 77 of the Companies Act;

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- 6.10. that, at the time of the individual grants, purchases and issuances of the 2014 Plan Shares, the Company has obtained a mandate from shareholders of the Company to issue ordinary shares of the Company pursuant to Section 161 of the Companies Act (the "Share Issue Mandate") and such Share Issue Mandate has not expired in accordance with its terms or been previously revoked or varied by the Company in general meeting;
- 6.11. that the 2014 Plan Shares to be issued under the terms of the 2014 Plan and the individual grants will be duly registered in the names of the persons who had been granted and issued the 2014 Plan Shares, or in the name of the Depository Trust Company or its nominee, as the case may be, and the certificates for the 2014 Plan Shares will be duly issued and delivered;
- 6.12. that no law (including, without limitation, any public policy) of any jurisdiction outside Singapore is relevant to or affects the opinions expressed or conclusions stated in this opinion;
- 6.13. that there shall be the absence of fraud, bad faith, undue influence, coercion or duress on the part of the Company and its respective officers, employees, agents and advisers;
- 6.14. that all acts, conditions or things required to be fulfilled, performed or effected in connection with the allotment and issue of the 2014 Plan Shares under the laws of any jurisdiction (other than by the Company under the laws of the Republic of Singapore in relation to the matters set out in paragraph 7 of this opinion) will be duly fulfilled, performed and complied with;
- 6.15. that there are no provisions of the laws of any jurisdiction (other than the laws of the Republic of Singapore in relation to the matters set out in paragraph 7 of this opinion) which will be contravened by the allotment and issue of the 2014 Plan Shares and that, insofar as any obligation expressed to be incurred or performed under the 2014 Plan and to the extent relevant, in connection with the allotment and issue of the 2014 Plan Shares, falls to be performed in or is otherwise subject to the laws of any jurisdiction (other than the Republic of Singapore in relation to the matters set out in paragraph 7 of this opinion), its performance will not be illegal by virtue of the laws of that jurisdiction;
- 6.16. that all applicable consents, approvals, authorisations, licences, exemptions or orders required from any applicable governmental or other regulatory authorities and all other requirements for allotment and issue of the 2014 Plan Shares (other than those required by the Company under the laws of the Republic of Singapore in relation to the matters set out in paragraph 7 of this opinion) have been (and have not been withdrawn) or will be duly obtained or fulfilled, and are (and will remain) in full force and effect, and that any conditions to which they are subject have been (or will be) satisfied;
- 6.17. that there are no agreements, documents, arrangements or transactions to which the Company is a party to that may in any way prohibit or restrict the allotment and issue of the 2014 Plan Shares;
- 6.18. that the Constitutive Documents will not be amended in a manner that would have the effect of rendering any of our opinions in paragraph 7 inaccurate;
- 6.19. that no foreign law is relevant to or affects the conclusions stated in this opinion, and none of the opinions expressed herein will be affected by the laws (including, without limitation, the public policy) of any jurisdiction outside the Republic of Singapore, and insofar as the laws of any jurisdiction outside the Republic of Singapore may be relevant, such laws have been or will be complied with; and

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6.20. that none of the 2014 Plan, the individual grants, the 2014 Plan Shares or any of the transactions contemplated under the 2014 Plan and the awards granted under the 2014 Plan constitutes or will constitute a sham.

D. Opinion

7. Based on the foregoing, and subject to the assumptions, limitations and qualifications set forth herein and having regard to such legal considerations as we have deemed relevant and subject to any matters not disclosed to us, we are of the opinion that, the 2014 Plan Shares will, when issued and delivered by the Company in accordance with the Constitutive Documents and the terms of the 2014 Plan, and pursuant to the laws of Singapore against payment of such amounts required in accordance with the rules of the 2014 Plan and the individual grants, be validly issued, fully paid and non-assessable.

E. Qualifications

- 8. This opinion is subject to the following qualifications:
 - 8.1. for the purposes of this opinion, we have assumed that the term "non-assessable" (a term which has no recognised meaning under the laws of the Republic of Singapore) in relation to the 2014 Plan Shares to be issued means that holders of such shares, having fully paid up all amounts due on such shares, or such shares having been credited as fully paid up, as the case may be, are under no further personal liability to make payments to the Company or its creditors or contribute to the assets or liabilities of the Company in their capacities purely as holders of such shares;
 - 8.2. we are not responsible for, and have not investigated or verified, the accuracy or completeness of the facts and information, including any statements of foreign law, or the reasonableness of any assumptions, statements of opinion or intention, contained in the documents referred to in paragraph 4 of this opinion. We do not express any opinion as to any matters of fact generally, including statements of foreign law, or the reasonableness of any assumptions or statements of opinion or intention, contained in the documents described in paragraph 4. In addition, we are not responsible for investigating or verifying whether any material fact has been omitted from such documents;
 - 8.3. we express no opinion as to the validity, binding effect or enforceability of any provision in the 2014 Plan, the individual grants or, where applicable, the 2014 Plan Shares by reference to a law other than that of the Republic of Singapore, or as to the availability in the Republic of Singapore of remedies which are available in other jurisdictions;
 - 8.4. with respect to matters of fact material to this opinion, we have relied on the statements of the responsible officers of the Company;
 - 8.5. we have only examined a copy of the Registration Statement and not the information or documents incorporated by reference to the Registration Statement (including, but without limitation, the Company's registration statement on Form S-8 (File No. 333-208598) that was filed by the Company with, and declared effective by, the Commission on 17 December 2015 and such information or documents incorporated by reference to such registration statement); and

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- 8.6. this opinion is strictly limited to matters stated in this opinion and is not to be construed as extending (by implication or otherwise) to the documents listed in paragraph 4 of this opinion, or to any other matter or document in connection with, referred to, contemplated by or incorporated by reference, in such documents.
- 9. We hereby consent to the use of our opinion as herein set forth as an exhibit to the Registration Statement. In giving this consent, we do not hereby admit and shall not be deemed to admit that we come within the category of persons whose consent is required under Sections 7 and 11 of the Securities Act or to the rules and regulations of the Commission thereunder.

This opinion is only for the benefit of the person to whom it is addressed, subject to the condition that such person accepts and acknowledges that this opinion may not be appropriate or sufficient for such person's purposes, and is strictly limited to the matters stated in this opinion and is not to be read as extending by implication to any other matter in connection with the 2014 Plan, or otherwise, including, but without limitation, any other document (including the Registration Statement). Further, except for the filing of this opinion with the Commission as an exhibit to the Registration Statement, this opinion is not to be circulated to, or relied upon by, any other person (other than persons entitled to rely on it pursuant to applicable provisions of federal securities law in the United States of America, if any) or quoted or referred to in any public document or filed with any governmental body or agency without our prior written consent.

Yours faithfully

/s/ WongPartnership LLP

WONGPARTNERSHIP LLP

Consent of Independent Registered Public Accounting Firm

The Board of Directors WAVE Life Sciences Ltd.:

We consent to the use of our report dated March 16, 2017, with respect to the consolidated balance sheets of WAVE Life Sciences Ltd. as of December 31, 2016 and 2015 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, 2016, incorporated by reference herein.

(signed) KPMG LLP

Cambridge, Massachusetts November 9, 2017