MINTZ LEVIN

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CERTAIN PORTIONS OF THIS LETTER AS FILED VIA EDGAR HAVE BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION. CONFIDENTIAL TREATMENT HAS BEEN REQUESTED FOR THE OMITTED PORTIONS, WHICH HAVE BEEN REPLACED WITH THE PLACEHOLDER "[***]."

October 23, 2015

VIA EDGAR

Securities and Exchange Commission Division of Corporation Finance 100 F Street, N.E. Washington, D.C. 20549

Attention:	Suzanne Hayes, Assistant Director
	Christina De Rosa
	Christian Windsor
	Lisa Vanjoske
	Joel Parker

Re: Wave Life Sciences Pte. Ltd. Registration Statement on Form S-1 (File No. 333-207379)

Dear Ladies and Gentlemen:

We are submitting this letter on behalf of Wave Life Sciences Pte. Ltd. (the "**Company**") in response to comments received from the staff (the "**Staff**") of the Securities and Exchange Commission (the "**Commission**") by letter dated October 2, 2015 (the "**Comment Letter**") relating to the Staff's review of the Company's registration statement on Form S-1 submitted confidentially to the Commission on September 4, 2015, which was subsequently amended in response to the Comment Letter and filed publicly with the Commission on October 9, 2015 (the "**Registration Statement**"). In this letter, we are responding only to comment number 6 in the Comment Letter, the text of which we have incorporated into this response letter for convenience.

Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.

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As an overview, the Company is filing today Amendment No. 1 to the Registration Statement in response to the Staff's second comment letter dated October 20, 2015. Subject to resolving any outstanding Staff comments and market conditions, the Company would like to (i) prepare over the weekend of October 31 to November 1, 2015 a preliminary prospectus reflecting the Share Split based on the bona fide price range for the Company's initial public offering ("**IPO**"), which the Company and its investment bankers have determined, each as discussed further below, (ii) file Amendment No. 2 with the Commission, which will include this bona fide IPO price range and reflect the Share Split, on Monday, November 2, 2015 and (iii) complete printing of the preliminary prospectus and commence a road show later that same day. Subject to market conditions, the Company's goal would be to obtain the effectiveness of the Registration Statement and price the offering by no later than November 12, 2015, the date after which financial statements for the period ended June 30, 2015 would be stale.

Accordingly, the purpose of this letter is to preview with the Staff this bona fide IPO range and the Company's analysis of how that range compares to the valuations the Company has used (or will use), for financial reporting purposes, for equity grants in March, July and October 2015. Because the Registration Statement contains financial statements no later than June 30, 2015, the only grants presented therein for financial reporting purposes are the March grants; the presentation of the July and October 2015 equity grants would appear in the financial statements for subsequent periods (i.e., the third quarter ended September 30, 2015 and the fourth quarter ending December 31, 2015).

Confidential Treatment Request

Due to the commercially sensitive nature of information contained herein, the Company hereby requests, pursuant to 17 C.F.R. § 200.83, that certain portions of this letter be maintained in confidence, not be made part of any public record and not be disclosed to any person as they contain confidential information. The Company has filed a separate copy of this letter, marked to show the portions redacted from the version filed via EDGAR and for which the Company is requesting confidential treatment. In accordance with 17 C.F.R. § 200.83(d)(1), if any person (including any governmental employee who is not an employee of the Commission) should request access to or an opportunity to inspect this letter, we request that we be immediately notified of any such request, be furnished with a copy of all written materials pertaining to such request (including, but not limited to, the request itself) and be given at least ten business days advance notice of any intended release so that the Company may, if deemed necessary or appropriate, pursue any remedies available to it. In such an event, we request that you telephone the undersigned rather than rely upon the U.S. mail for such notice. The address and telephone number for Matthew Gardella, the responsible representative, is c/o Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., One Financial Center, Boston, MA 02111, telephone number (617) 542-6000.

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Comment from the Staff:

Management's Discussion and Analysis of Financial Condition and Results of Operations

Critical Accounting Policies and Significant Judgments and Estimates

Share-Based Compensation, page 66

6. We may have additional comments on your accounting for equity issuances including stock compensation and beneficial conversion features. Once you have an estimated offering price, please provide us an analysis explaining the reasons for the differences between recent valuations of your common stock leading up to the IPO and the estimated offering price.

Response:

The Company supplementally advises the Staff that on October 23, 2015, representatives of the lead book-running managers of its IPO advised the Company that, based on then-current market conditions, they anticipated that the underwriters currently anticipate recommending to the Company a preliminary estimated IPO price range of \$[***] to \$[***] per share (the "**Preliminary IPO Price Range**"). The share numbers, as well as all option exercise prices and estimated fair values of ordinary shares referred to in this letter, have been adjusted to reflect an estimated 4.683373-to-1.0 share split of the Company's capital shares (the "**Share Split**"), which the Company plans to reflect in a subsequent pre-effective amendment to the Registration Statement.

The Preliminary IPO Price Range and the related Share Split are based on existing conditions in the public capital markets for biotechnology companies, the Company's financial position and prospects (assuming the completion of the IPO), the market valuations of comparable publicly traded companies and preliminary discussions with the underwriters regarding potential valuations for the Company. Until such time as the Company revises the Registration Statement through a pre-effective amendment to include the price range and other details of the IPO and to commence the road show, the Preliminary IPO Price Range and the Share Split remain subject to adjustment based on factors outside the Company's control, such as changes in market conditions, the Company's business and prospects and the valuation of comparable publicly traded companies.

Historically, the fair value of the ordinary shares underlying the Company's share-based awards has been determined on each grant date by the Company's board of directors (the "**Board**"), with input from management. All options to purchase the Company's ordinary shares were intended to be granted with an exercise price per share no less than the fair market value per share of the

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Company's ordinary shares underlying those options on the date of grant, as determined by the Board in good faith and based on the information known to the Board on the date of grant. In the absence of a public trading market for the Company's ordinary shares, on each grant date, the Board considered various objective and subjective factors described in detail in the Registration Statement to determine fair value, including contemporaneous valuations from third-party valuation specialists using methodologies, approaches and assumptions consistent with the guidelines outlined in the American Institute of Certified Public Accountants Practice Aid, Valuation of Privately-Held-Company Equity Securities Issued as Compensation (the "**Practice Aid**").

In connection with its preparation for the IPO, the Company completed retrospective valuations for March 2015 and June 2015, using methodologies, approaches and assumptions consistent with the Practice Aid.

The following table summarizes share awards granted since January 1, 2015, giving effect to the Share Split.

Number of Instruments Granted (#)	Per Share Exercise Price (\$)	Fair Value Per Share of Ordinary Shares (\$)	Type of Valuation Methodology
1,997,220	2.14	3.81	Retrospective
221,163	N/A(1)	3.81	Retrospective
140,501	2.14	3.81	Retrospective
114,274	5.17	7.59	Retrospective
82,662	8.82	8.82	Contemporaneous
	Instruments Granted (#) 1,997,220 221,163 140,501 114,274	Instruments Granted (#) Exercise Price (\$) 1,997,220 2.14 221,163 N/A(1) 140,501 2.14 114,274 5.17	Number of Instruments Per Share Exercise Per Share of Ordinary 1,997,220 2.14 3.81 221,163 N/A(1) 3.81 140,501 2.14 3.81 114,274 5.17 7.59

(1) Not applicable since the award was for fully vested ordinary shares.

A discussion of each valuation and related award is as follows:

March 2015 Awards

On March 10, 2015 and March 22, 2015, the Board granted options to purchase an aggregate of 1,997,220 and 140,501 ordinary shares, respectively. Additionally, on March 10, 2015, the Board granted 221,163 fully vested ordinary shares to an executive of the Company.

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March 2015 Retrospective Valuation

In accordance with the Practice Aid, the March 10, 2015 valuation used the Market Approach to determine an enterprise value. The valuation then used the Probability-Weighted Expected Return Method ("**PWERM**") to allocate and value the ordinary shares.

The valuation utilized the market data from recent IPOs of companies in the biopharmaceutical industry to determine the enterprise value under a short-term and long-term IPO scenario.

- Under the short-term IPO scenario, the Company estimated it would be approximately 0.8 years until this transaction. The Company selected an enterprise value between the 50th and 75th percentiles of comparable public biopharmaceutical transactions. The Company discounted this scenario with a 30.0% discount rate which was based on the Venture Capital Rate of Return Studies and also applied a 7.5% Discount for Lack of Marketability ("**DLOM**") under this scenario.
- In the longer-term IPO scenario, the Company estimated it would be approximately 1.5 years until this transaction. The selected enterprise value was between the 50th and 75th percentile of the comparable public biopharmaceutical transactions. The Company also used a 30.0% discount rate in this scenario and applied a DLOM of 10.0% to the concluded value under this scenario.

The valuation also utilized market data from recent guideline M&A transactions in the biopharmaceutical industry to determine the enterprise value under a liquidity event through a trade sale/merger transaction (high M&A) and sale of the Company's intellectual property if neither a success sale/merger or an IPO materializes (low M&A).

- Under the high M&A scenario, the Company selected an enterprise value between the 50th percentile and 75th percentile for a sale. The Company selected a term of 2.0 years as an opportune timeframe for an M&A transaction to occur, utilized a 30.0% discount rate and applied a DLOM of 15.0%.
- Under the low M&A scenario, the Company selected an enterprise value just below the 25th percentile range for the low M&A scenario. The Company selected a term of 1.3 years, utilized a 30.0% discount rate and applied a DLOM of 15.0%.

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To determine the ordinary share value under the PWERM, the Company assigned the following probabilities to each scenario:

Short-term IPO	20.0%
Long-term IPO	10.0
High M&A	55.0
Low M&A	15.0
Total	100.0%

The resulting fair value of the Company's ordinary shares was \$3.81 per share, which the Company utilized for determining the fair value per share for the March 2015 option grants.

July 9, 2015 Awards

On July 9, 2015, the Board granted options to purchase an aggregate of 114,274 ordinary shares with an exercise price of \$5.17 per share.

June 2015 Retrospective Valuation

In accordance with the Practice Aid, the June 24, 2015 valuation used the Market Approach to determine an enterprise value. The valuation then used the PWERM to allocate and value the ordinary shares.

The valuation utilized market data from recent IPOs of companies in the biopharmaceutical industry to determine the enterprise value under a short term and long term IPO scenario.

- Under the short-term IPO scenario, the Company estimated it would be approximately 0.5 years until this transaction. The Company selected an
 enterprise value between the 50th and 75th percentiles of comparable public biopharmaceutical transactions. The Company discounted this
 scenario with a 25.0% discount rate which was based on the Venture Capital Rate of Return Studies and also applied a 5.0% DLOM under this
 scenario.
- In the longer-term IPO scenario, the Company estimated it would be approximately 1.3 years until this transaction. The Company selected an
 enterprise value between the 50th and 75th percentiles of comparable public biopharmaceutical transactions. The Company also used a 25.0%
 discount rate in this scenario and applied a DLOM of 7.5% to the concluded value under this scenario.

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The valuation utilized market data from recent guideline M&A transactions in the biopharmaceutical industry to determine the enterprise value under a high and low M&A scenario.

- Under the high M&A scenario, the Company selected an enterprise value between the 50th percentile and 75th percentile for a sale. The Company selected a term of 1.8 years as an opportune timeframe for an M&A transaction to occur, utilized a 25.0% discount rate and applied a DLOM of 15.0%.
- Under the low M&A scenario, the Company selected an enterprise value just below the 25th percentile range for the low M&A scenario. The Company selected a term of 1.0 years, utilized a 25.0% discount rate and applied a DLOM of 15.0%.

To determine the ordinary share value under the PWERM, the Company assigned the following probabilities to each scenario:

Short-term IPO	40.0%
Long-term IPO	15.0
High M&A	35.0
Low M&A	10.0
Total	100.0%

The resulting fair value of the Company's ordinary shares was \$7.59 per share, which the Company utilized for determining the fair value per share for the June 2015 option grants.

The preparation of the valuation included consideration of the following factors:

Company Specific

During the period from March 2015 through June 2015, the Company achieved the following milestones:

- The Company expanded the breath of the target platform and further developed the proof of concept across multiple modalities, including but not limited to Huntington's disease, Duchenne muscular dystrophy ("**DMD**") and inflammatory bowel disease ("**IBD**").
- The Company identified and targeted HTT SNP-1 and HTT SNP-2; Exon 51 in DMD; and SMAD7 in IBD.

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- The Company determined that based on its initial selection criteria of novel and fast-follower opportunities, its platform can potentially be used in the near term to design treatments for approximately 25 other potential target indications, mostly consisting of orphan indications, with an initial focus on orphan neuromuscular and central nervous system disease targets.
- The Company focused on late-stage discovery programs in epidermolysis bullosa simplex, in which it is targeting KRT14 SNP-1 and KRT14 SNP-2, and in DMD, in which the Company is focused on an additional DMD target, AcRIIb. The Company expects to identify lead candidates for these programs in 2016.
- In April 2015, the Company entered into two research collaborations:
 - A master sponsored research agreement for the treatment of Huntington disease with The Children's Hospital of Philadelphia ("**CHOP**"). Under the agreement, the Company agreed to pay CHOP up to \$0.2 million to conduct research activities, on a project-by-project basis, for the Company's benefit over a period of at least 5 years.
 - A translational research collaboration agreement with The Chancellor, Masters, and Scholars of the University of Oxford ("**Oxford**"). The agreement with Oxford involves characterizing the Company's proprietary isomers in order to improve the pharmacology of oligonucleotides for the treatment of DMD. Under the agreement, the Company agreed to pay Oxford up to \$0.4 million to conduct specified research services for the Company's benefit during an initial 18-month term, which may be extended by the parties.
- In June 2015, the Company entered into a technology license agreement with Max-Planck-Innovation GmbH ("**Max-Planck**"), obtaining a coexclusive royalty-bearing, worldwide license with the right to sublicense to certain patent rights within a patent portfolio. The Company intends to develop and commercialize therapeutic products based on the Company's patent rights under this license. The Company will be required to make payments based upon regulatory milestones, including the initiation of clinical trials, and product approval milestones totaling up to approximately \$1.6 million for each licensed product reaching such clinical stage, as well as pay royalties in the low single digits, calculated as a percentage of cumulative annual net sales of a licensed product.

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Macro-Economic Factors

During the period from March 2015 through June 2015, the Company noted the following macro-economic factors related to the healthcare and biotechnology industry:

- The NASDAQ Biotechnology Index rose approximately 10% during the period from March 10, 2015 through June 24, 2015, or approximately 35% on an annual basis.
- The number of healthcare IPOs that priced increased from 18 in the first quarter of 2015 to 30 in the second quarter of 2015, according to the US IPO Third Quarter Report published by Renaissance Capital. The study indicated that the gross proceeds raised increased from \$1.2 billion from the first quarter of 2015 to \$2.7 billion for second quarter of 2015.

September 2015 Contemporaneous Valuation

In accordance with the Practice Aid, the September 30, 2015 valuation used the Market Approach to determine an enterprise value. The valuation then used the PWERM to allocate and value the ordinary shares.

The Company utilized market data from recent IPOs of companies in the biopharmaceutical industry to determine an enterprise value under a short-term and long-term IPO scenario.

- Under the short-term IPO scenario, the Company estimated it would be approximately 0.3 years until this transaction. The Company selected an enterprise value between the 50th and 75th percentiles of comparable public biopharmaceutical transactions. The Company discounted this scenario with a 25.0% discount rate which was based on the Venture Capital Rate of Return Studies and also a 5.0% DLOM under this scenario.
- In the longer-term IPO scenario, the Company estimated it would be approximately 1.0 years until this transaction. The Company selected an enterprise value between the 50th and 75th percentiles of comparable public biopharmaceutical transactions. The Company also used a 25.0% discount rate in this scenario and applied a DLOM of 10.0% to the concluded value under this scenario.

The valuation also considered the market approach utilizing the market data from recent guideline M&A transactions in the biopharmaceutical industry to determine the enterprise value under a high and low M&A scenario.

- Under the high M&A scenario, the Company selected an enterprise value between the 50th percentile and 75th percentile for a sale. The Company selected a term of 1.5 years as an opportune timeframe for an M&A transaction to occur, utilized a 25.0% discount rate and applied a DLOM of 15.0%.
- Under the low M&A scenario, the Company selected an enterprise value between the 25th percentile and 50th percentile for a sale. The Company selected a term of 1.5 years, utilized a 25.0% discount rate and applied a DLOM of 15.0%.

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To determine the ordinary share value under the PWERM, the Company assigned the following probabilities to each scenario:

Short-term IPO	45.0%
Long-term IPO	20.0
High M&A	30.0
Low M&A	5.0
Total	100.0%

The resulting fair value of the Company's ordinary shares was \$8.82 per share.

The preparation of the valuation included consideration of the following factors:

Company Specific

- On August 14, 2015, the Company issued an aggregate of 1,320,000 Series B preferred shares at a purchase price of \$50 per share to certain third-party investors for \$62.5 million of net proceeds. The Series B preferred shares automatically convert on the effectiveness of the IPO, and applying the Share Split to the existing Series B conversion ratio of 1-to-1, the post-split Series B preferred share price would be \$10.68 per share.
- In September 2015, the Company entered into a research collaboration agreement with the University of Dundee ("**Dundee**"). The Company's research collaboration with Dundee involves characterizing the Company's proprietary isomers in order to improve the pharmacology of oligonucleotides for the treatment of EBS. Under the agreement, both parties are obligated to use reasonable endeavors to carry out the research project in accordance with the agreed upon research plan. Under the agreement, Dundee has agreed to conduct specified research services for the Company's benefit during an initial two-year term, which may be extended by the parties.
- On September 4, 2015, the Company confidentially submitted the draft registration statement to the Commission.

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Macro-Economic Factors

During the period from August 17, 2015 through September 30, 2015, the Company noted the following macro-economic factors related to the healthcare and biotechnology industry:

- The NASDAQ Biotechnology Index decreased approximately 19% during the period from August 17, 2015 through September 30, 2015, or approximately 148% on an annual basis.
- The number of healthcare IPOs that priced decreased from 30 in the second quarter of 2015 to 18 in the third quarter of 2015, according to the US IPO Third Quarter Report published by Renaissance Capital. The study indicated that the gross proceeds raised decreased from \$2.7 billion from the second quarter of 2015 to \$1.9 billion for third quarter of 2015.

October 2015 Awards

On October 7, 2015, the Board granted options to purchase an aggregate of 82,662 ordinary shares based on the September 30, 2015 valuation of \$8.82.

However, the Company also advises the Staff that once the bona fide initial offering price range has been determined, the Company anticipates performing an additional valuation to determine the fair values of the options granted in October 2015.

The Company advises the Staff that it will set forth a bona fide initial offering price range in a pre-effective amendment to the Registration Statement prior to the distribution of any preliminary prospectus, which price range will be within the Preliminary IPO Price Range. The Company currently expects this pre-effective amendment to occur on or near November 2, 2015.

The Company respectfully submits to the Staff that the increase in value between the most recent valuation described above, compared to the Preliminary IPO Price Range, is reasonable. Specifically, the Company submits to the Staff that the September 30, 2015 valuation appropriately reflected the potential for a stay-private scenario. The probability of completing an IPO was determined to be 70% at September 30, 2015, and the IPO equity value determination was \$11.88 per share, before applying a 0.95 present value discount and a DLOM of 5.0%, which took into consideration the continuing volatility of the biotechnology IPO market, the failure of biotechnology companies in recent months to complete an IPO and a less favorable IPO valuation than what is currently anticipated. In contrast, the Preliminary IPO Price Range is a single outcome which necessarily assumes that the IPO has occurred and a public market for the Company's ordinary shares has been created. As a result, unlike the valuation performed in connection with the Company's option grants as a private company, the Preliminary IPO Price Range excludes any marketability or illiquidity discount for the Company's ordinary shares and takes into account the IPO and resulting liquidity of the ordinary shares.

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Finally, there are other factors that support the discount in the September 30, 2015 valuation determination, compared to the Preliminary IPO Price Range, including (i) the inherent uncertainty of completing a successful IPO, (ii) the possibility that the actual IPO price could be substantially lower than the Preliminary IPO Price Range recommended by the Company's underwriters and (iii) the 180-day lock-up agreement to which the shares underlying the share options will be subject following the IPO.

Additional Disclosures Included in a Subsequent Pre-Effective Amendment

In connection with the implementation and required disclosures of the Share Split, in a subsequent pre-effective amendment the Company will include the following disclosures:

• Update the first paragraph on page 69 of the Registration Statement in the section titled "Managements' Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Policies and Significant Judgments and Estimates—Share-Based Compensation" so that it reads:

Based on the mid-point of the price range set forth on the cover of this prospectus, the aggregate intrinsic value of our outstanding share options as of June 30, 2015 was \$[***] million.

• Insert the following disclosure as a new paragraph immediately following the second full paragraph on page 69 of the Registration Statement in the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Policies and Significant Judgments and Estimates—Share-Based Compensation":

The mid-point of the initial public offering price range set forth on the cover of this prospectus, \$[***] per share, was determined as a result of negotiations between us and the underwriters. In comparison, our valuation of our ordinary shares as of September 30, 2015 was \$8.82 per share. As is typical in initial public offerings, the initial public offering price was not derived using a formal determination of fair value, but was determined by negotiation between us and the underwriters. Among the factors that were considered in setting this price were the following: (i) the history and prospects for the industry in which we compete; (ii) our financial information; (iii) the ability of our management and our business potential and earning prospects; (iv) the prevailing securities markets at the time of this offering; and (v) the recent market prices of, and the demand for, publicly traded shares of generally comparable companies.

* * *

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The Company respectfully requests the Staff's assistance in completing its review of the supplemental information contained herein as soon as possible. Please advise us if we can provide any further information or assistance to facilitate your review. And please contact me at (617) 542-6000 if you have any questions regarding the Registration Statement or the foregoing information.

We thank you for your time and attention.

Sincerely,

/s/ Matthew J. Gardella Matthew J. Gardella

cc:

<u>WAVE Life Sciences Pte. Ltd.</u> Paul B. Bolno, M.D.

<u>Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.</u> William C. Hicks

<u>Cooley LLP</u> Frank F. Rahmani Nicole Brookshire John T. McKenna

<u>KPMG LLP</u> Janet M. Lehman