WAVE LIFE SCIENCES LTD. 8 Cross Street #10-00, PWC Building Singapore 048424

February 2, 2017

VIA EDGAR

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

RE: WAVE Life Sciences Ltd.

Registration Statement on Form S-3, as amended

File No. 333-215428 Acceleration Request

Ladies and Gentlemen:

With respect to the above-referenced Registration Statement on Form S-3, as amended (the "Registration Statement"), and pursuant to Rule 461 of Regulation C promulgated under the Securities Act of 1933, as amended, the undersigned hereby respectfully requests, on behalf of WAVE Life Sciences Ltd. (the "Company"), that the Securities and Exchange Commission (the "Commission") accelerate the effective date of the Registration Statement to Monday, February 6, 2017, at 4:00 p.m. Eastern Time, or as soon as practicable thereafter.

The cooperation of the staff in meeting the timetable described above is very much appreciated.

Please call Brian Keane or John Condon of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., counsel to the Company, at (617) 542-6000, with any comments or questions regarding the Registration Statement.

Very truly yours,

WAVE LIFE SCIENCES LTD.

/s/ Keith Regnante

Keith Regnante Chief Financial Officer

CC: Josh Samples, Securities and Exchange Commission
Joseph McCann, Securities and Exchange Commission
Linda Rockett, Esq., General Counsel, Wave Life Sciences Ltd.
Brian P. Keane, Esq., Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.
John P. Condon, Esq., Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.