

| OMB APPROVAL                                 |           |
|--|-----------|
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Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

**STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP**

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

|   |   |  |
|---|---|--|
| 1. Name and Address of Reporting Person*<br><b>BOLNO PAUL</b><br><br>(Last) (First) (Middle)<br><b>C/O WAVE LIFE SCIENCES LTD.,</b><br><b>733 CONCORD AVE.</b><br><br>(Street)<br><b>CAMBRIDGE MA 02138</b><br><br>(City) (State) (Zip) | 2. Issuer Name and Ticker or Trading Symbol<br><b>Wave Life Sciences Ltd. [ WVE ]</b> | 5. Relationship of Reporting Person(s) to Issuer<br>(Check all applicable)<br><input checked="" type="checkbox"/> Director 10% Owner<br><input checked="" type="checkbox"/> Officer (give title below) Other (specify below)<br><b>President and CEO</b> |
|   | 3. Date of Earliest Transaction (Month/Day/Year)<br><b>05/25/2018</b>                 |  |
| 4. If Amendment, Date of Original Filed (Month/Day/Year)  |   |  |

**Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned**

| 1. Title of Security (Instr. 3) | 2. Transaction Date (Month/Day/Year) | 2A. Deemed Execution Date, if any (Month/Day/Year) | 3. Transaction Code (Instr. 8) |   | 4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5) |            |        | 5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4) | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) |
|---------------------------------|--------------------------------------|--|--------------------------------|---|---|------------|--------|---|--|---|
|                                 |                                      |  | Code                           | V | Amount  | (A) or (D) | Price  |   |  |   |
| Ordinary Shares                 | 05/25/2018                           |  | M <sup>(1)</sup>               |   | 8,316   | A          | \$2.48 | 287,258   | D  |   |
| Ordinary Shares                 | 05/25/2018                           |  | S <sup>(1)</sup>               |   | 8,316   | D          | \$45   | 278,942   | D  |   |
| Ordinary Shares                 | 05/29/2018                           |  | M <sup>(1)</sup>               |   | 3,145   | A          | \$2.48 | 282,087   | D  |   |
| Ordinary Shares                 | 05/29/2018                           |  | S <sup>(1)</sup>               |   | 3,145   | D          | \$45   | 278,942   | D  |   |
| Ordinary Shares                 | 05/30/2018                           |  | M <sup>(1)</sup>               |   | 20,250  | A          | \$2.48 | 299,192   | D  |   |
| Ordinary Shares                 | 05/30/2018                           |  | S <sup>(1)</sup>               |   | 20,250  | D          | \$45   | 278,942   | D  |   |

**Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)**

| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | 3A. Deemed Execution Date, if any (Month/Day/Year) | 4. Transaction Code (Instr. 8) |   | 5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) | 6. Date Exercisable and Expiration Date (Month/Day/Year) |                 | 7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4) | 8. Price of Derivative Security (Instr. 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4) | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) |       |
|--|--|--------------------------------------|--|--------------------------------|---|--|--|-----------------|---|--|--|---|--|-------|
|  |  |                                      |  | Code                           | V |  | Date Exercisable   | Expiration Date |   |  |  |   |  | Title |
| Share Option (right to buy)                | \$2.48   | 05/25/2018                           |  | M <sup>(1)</sup>               |   | 8,316  | (2)  | 03/10/2025      | Ordinary Shares   | 8,316                                      | \$0.00   | 396,173   | D  |       |
| Share Option (right to buy)                | \$2.48   | 05/29/2018                           |  | M <sup>(1)</sup>               |   | 3,145  | (2)  | 03/10/2025      | Ordinary Shares   | 3,145                                      | \$0.00   | 393,028   | D  |       |
| Share Option (right to buy)                | \$2.48   | 05/30/2018                           |  | M <sup>(1)</sup>               |   | 20,250   | (2)  | 03/10/2025      | Ordinary Shares   | 20,250                                     | \$0.00   | 372,778   | D  |       |

**Explanation of Responses:**

- The option exercise and sale reported in this Form 4 were effected pursuant to a Rule 10b5-1 trading plan adopted by the reporting person on March 14, 2018.
- The share option represented a right to purchase a total of 422,778 ordinary shares that vest in thirty-six monthly installments beginning on December 12, 2014.

**Remarks:**

/s/ Paul B. Bolno 05/30/2018

\*\* Signature of Reporting Person Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

\* If the form is filed by more than one reporting person, see Instruction 4 (b)(v).

\*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

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