

---

---

SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

SCHEDULE 13D

Under the Securities Exchange Act of 1934

(Amendment No. 7)\*

**WAVE LIFE SCIENCES LTD.**

(Name of Issuer)

**Common Stock, \$0.00001 par value per share**

(Title of Class of Securities)

**Y95308105**

(CUSIP Number)

**Peter Kolchinsky  
RA Capital Management, L.P., 200 Berkeley Street, 18th Floor  
Boston, MA, 02116  
617.778.2500**

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

**11/11/2025**

(Date of Event Which Requires Filing of This Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of Â§ 240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

---

---

SCHEDULE 13D

CUSIP No. Y95308105

Name of reporting person

1

RA Capital Management, L.P.

Check the appropriate box if a member of a Group (See Instructions)

2  (a)  
 (b)

3 SEC use only  
Source of funds (See Instructions)

4 AF, OO  
Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)

5   
Citizenship or place of organization

6 DELAWARE  
Sole Voting Power

7 0.00  
Number of Shares Beneficially Owned by Each Reporting Person With:  
Shared Voting Power

8 25,453,010.00  
Sole Dispositive Power

9 0.00  
Shared Dispositive Power

10 25,453,010.00  
Aggregate amount beneficially owned by each reporting person

11 25,453,010.00  
Check if the aggregate amount in Row (11) excludes certain shares (See Instructions)

12   
Percent of class represented by amount in Row (11)

13 14.6 %  
Type of Reporting Person (See Instructions)

14 IA, PN

## SCHEDULE 13D

**CUSIP No.** Y95308105

Name of reporting person

1 Peter Kolchinsky  
Check the appropriate box if a member of a Group (See Instructions)

2  (a)  
 (b)

3 SEC use only  
Source of funds (See Instructions)

4 AF  
Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)

5

6                   Citizenship or place of organization  
                  UNITED STATES  
                  Sole Voting Power  
7  
Number of       0.00  
Shares         Shared Voting Power  
Beneficially 8  
Owned by       25,453,010.00  
Each           Sole Dispositive Power  
Reporting      9  
Person         0.00  
With:          Shared Dispositive Power  
                  10  
                  25,453,010.00  
Aggregate amount beneficially owned by each reporting person  
11  
25,453,010.00  
Check if the aggregate amount in Row (11) excludes certain shares (See Instructions)  
12  
  
Percent of class represented by amount in Row (11)  
13  
14.6 %  
Type of Reporting Person (See Instructions)  
14  
HC, IN

## SCHEDULE 13D

**CUSIP No.** Y95308105

1                   Name of reporting person  
                  Rajeev Shah  
                  Check the appropriate box if a member of a Group (See Instructions)  
2  
 (a)  
 (b)  
3                   SEC use only  
                  Source of funds (See Instructions)  
4  
                  AF  
                  Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)  
5  
  
                  Citizenship or place of organization  
6  
                  UNITED STATES

7 Sole Voting Power  
 0.00  
 Number of Shares Beneficially Owned by Each Reporting Person 8  
 Shared Voting Power  
 25,453,010.00  
 Sole Dispositive Power  
 0.00  
 With: Shared Dispositive Power  
 10  
 25,453,010.00  
 Aggregate amount beneficially owned by each reporting person  
 11  
 25,453,010.00  
 Check if the aggregate amount in Row (11) excludes certain shares (See Instructions)  
 12  
  
 Percent of class represented by amount in Row (11)  
 13  
 14.6 %  
 Type of Reporting Person (See Instructions)  
 14  
 HC, IN

## SCHEDULE 13D

**CUSIP No.** Y95308105

1 Name of reporting person  
 RA Capital Healthcare Fund, L.P.  
 Check the appropriate box if a member of a Group (See Instructions)  
 2  
 (a)  
 (b)  
 3 SEC use only  
 Source of funds (See Instructions)  
 4  
 WC  
 Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)  
 5  
  
 Citizenship or place of organization  
 6  
 DELAWARE  
 Sole Voting Power  
 7  
 0.00  
 Number of Shares Beneficially Owned by Each Reporting Person 8  
 Shared Voting Power  
 25,296,665.00  
 Sole Dispositive Power  
 0.00  
 With: Shared Dispositive Power  
 10  
 25,296,665.00

11 Aggregate amount beneficially owned by each reporting person  
25,296,665.00  
12 Check if the aggregate amount in Row (11) excludes certain shares (See Instructions)  
  
13 Percent of class represented by amount in Row (11)  
14.5 %  
Type of Reporting Person (See Instructions)  
14 PN

## SCHEDULE 13D

### Item 1. Security and Issuer

Title of Class of Securities:

(a) Common Stock, \$0.00001 par value per share

Name of Issuer:

(b) WAVE LIFE SCIENCES LTD.

Address of Issuer's Principal Executive Offices:

(c) 7 Straits View #12-00, Marina One, East Tower , Singapore, SINGAPORE , 018936.

#### Item 1 Comment:

Item 1 of the Statement is amended and supplemented as follows: This Amendment No. 7 (this "Amendment No. 7" or this "Schedule 13D/A") amends and supplements the statement on Schedule 13D originally filed with the Securities and Exchange Commission (the "SEC") on November 27, 2015, and amended on November 15, 2017, January 28, 2019, August 18, 2021, November 12, 2021, June 21, 2022 and October 1, 2024 (as amended, the "Statement") by the Reporting Persons. This Amendment No. 7 is being filed to report the dilution of the Reporting Persons' beneficial ownership in the Issuer's common stock and not as a result of any acquisition or disposition of securities by the Reporting Persons. Unless otherwise defined herein, capitalized terms used in this Amendment No. 7 shall have the meanings ascribed to them in the Statement. Unless amended or supplemented below, the information in the Statement remains unchanged.

### Item 2. Identity and Background

This Schedule 13D/A is being filed on behalf of RA Capital Management, L.P. ("RA Capital"), Peter Kolchinsky, Rajeev Shah, and RA Capital Healthcare Fund, L.P. (the "Fund"), who are collectively referred to herein as the "Reporting Persons." The agreement among the Reporting Persons to file this 13D/A jointly in accordance with Rule 13d-1(k) of the Securities Exchange Act of 1934, as amended (the "Act"), is attached hereto as Exhibit 99.1. The Reporting Persons' beneficial ownership of the Issuer's securities consists of (i) 18,203,009 ordinary shares directly held by the Fund; (ii) 7,093,656 ordinary shares issuable upon exercise of pre-funded warrants ("Pre-Funded Warrants") directly held by the Fund, which are immediately exercisable in full as of the date hereof; and (iii) 16,115 ordinary shares and 140,230 vested share options (right to buy) held by Dr. Kolchinsky for the benefit of RA Capital. RA Capital Healthcare Fund GP, LLC is the general partner of the Fund. The general partner of RA Capital is RA Capital Management GP, LLC, of which Dr. Kolchinsky and Mr. Shah are the controlling persons. RA Capital serves as investment adviser for the Fund and may be deemed a beneficial owner, for purposes of Section 13(d) of the Act, of any securities of the Issuer held by the Fund. The Fund has delegated to RA Capital the sole power to vote and the sole power to dispose of all securities held in its portfolio, including the shares of the Issuer's Ordinary Shares reported herein. Because the Fund has divested itself of voting and investment power over the reported securities it holds and may not revoke that delegation on less than 61 days' notice, the Fund disclaims beneficial ownership of the securities it holds for purposes of Section 13(d) of the Act and therefore disclaims any obligation to report ownership of the reported securities under Section 13(d) of the Act. As managers of RA Capital, Dr. Kolchinsky and Mr. Shah may be deemed beneficial owners, for purposes of Section 13(d) of the Act, of any securities of the Issuer beneficially owned by RA Capital. RA Capital, Dr. Kolchinsky, and Mr. Shah disclaim beneficial ownership of the securities reported in this Schedule 13D/A other than for the purpose of determining their obligations under Section 13(d) of the Act, and the filing of this Schedule 13D/A shall not be deemed an admission that either RA Capital, Dr. Kolchinsky, or Mr. Shah is the beneficial owner of such securities for any other purpose.

(b) The address of the principal business office of each of the Reporting Persons is 200 Berkeley Street, 18th Floor, Boston, MA 02116.

(c) The Fund is a private investment vehicle. RA Capital provides investment management services to the Fund. The principal occupation of each of Dr. Kolchinsky and Mr. Shah is investment management.

(d) During the last five years, none of the Reporting Persons has been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors).

- (e) During the last five years, none of the Reporting Persons has been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree of final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.
- (f) See Item 6 of the cover pages.
- Item 5. Interest in Securities of the Issuer
- Rows 11 and 13 of each Reporting Person's cover page to this 13D/A set forth the aggregate number of ordinary shares and percentages of the ordinary shares beneficially owned by such Reporting Person and are incorporated by reference. The percentage set forth in each row 13 is based upon 167,181,784 ordinary shares outstanding as of November 7, 2025, as reported in the Issuer's Quarterly Report on Form 10-Q filed with the SEC on November 10, 2025, and giving effect to stock options and Pre-Funded Warrants, to the extent exercisable within 60 days hereof, as referenced herein.
- (a)
- (b) Rows 7 through 10 of each Reporting Person's cover page to this 13D/A set forth the number of ordinary shares as to which such Reporting Person has the sole or shared power to vote or direct the vote and sole or shared power to dispose or to direct the disposition and are incorporated by reference.
- (c) Except as set forth below, none of the Reporting Persons has effected any transactions with respect to the securities of the Issuer during the past sixty days. Weighted Low High Reporting No. Average Price Price Transaction Person Date Shares Price (\$) (\$) (\$) Open Market Purchase Fund 11/13/2025 1,000 6.6875 6.685 6.695
- (d) No person (other than the Reporting Persons) is known to have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, the ordinary shares subject to this 13D/A.
- (e) Not applicable.
- Item 7. Material to be Filed as Exhibits.
- Exhibit 99.1 Joint Filing Agreement (incorporated by reference to Exhibit 1 to the Reporting Persons' Schedule 13D/A filed with the SEC on October 1, 2024).

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

RA Capital Management, L.P.

Signature: /s/ Peter Kolchinsky

Name/Title: By Peter Kolchinsky, Authorized Signatory

Date: 11/13/2025

Peter Kolchinsky

Signature: /s/ Peter Kolchinsky

Name/Title: Peter Kolchinsky

Date: 11/13/2025

Rajeev Shah

Signature: /s/ Rajeev Shah

Name/Title: Rajeev Shah

Date: 11/13/2025

RA Capital Healthcare Fund, L.P.

Signature: /s/ Peter Kolchinsky

Name/Title: By RA Capital Healthcare Fund GP, LLC, its General Partner, By Peter Kolchinsky, Manager

Date: 11/13/2025