

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

OMB APPROVAL

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SCHEDULE 13D/A

Under the Securities Exchange Act of 1934
(Amendment No. 3)*

Wave Life Sciences Ltd.

(Name of Issuer)

Ordinary Shares

(Title of Class of Securities)

Y95308105

(CUSIP Number)

RA Capital Management, LLC
20 Park Plaza, Suite 1200
Boston, MA 02116
Telephone: 617.778.2512
Attn: Peter Kolchinsky

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

August 10, 2021

(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 §§240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box.

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See Rule 13d-7 for other parties to whom copies are to be sent.

* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

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).

1	Names of Reporting Persons. RA Capital Management, L.P.
2	Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>
3	SEC Use Only
4	Source of Funds (See Instructions): AF
5	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e): <input type="checkbox"/>
6	Citizenship or Place of Organization. Delaware
7	Sole Voting Power 0 shares
8	Shared Voting Power 7,823,207 shares
9	Sole Dispositive Power 0 shares
10	Shared Dispositive Power 7,823,207 shares
11	Aggregate Amount Beneficially Owned by Each Reporting Person 7,823,207 shares
12	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) <input type="checkbox"/>
13	Percent of Class Represented by Amount in Row (11) 15.39%¹
14	Type of Reporting Person (See Instructions) IA, PN

¹ The reporting person is the beneficial owner of 7,823,207 shares of the Issuer's Ordinary Shares which constitute approximately 15.32% of the class outstanding. The percentage calculation assumes that there are currently 50,818,370 outstanding shares of Ordinary Shares of the Issuer, based on the Issuer's Form 8-K as filed with the Securities and Exchange Commission ("SEC") on August 16, 2021 and giving effect to 47,820 vested stock options (right to buy) held by Dr. Peter Kolchinsky for the benefit of RA Capital.

1	Names of Reporting Persons. Peter Kolchinsky	
2	Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC Use Only	
4	Source of Funds (See Instructions): AF	
5	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e): <input type="checkbox"/>	
6	Citizenship or Place of Organization. United States	
7	Sole Voting Power 0 shares	
Number of Shares Beneficially Owned by Each Reporting Person With	8	Shared Voting Power 7,823,207 shares
	9	Sole Dispositive Power 0 shares
	10	Shared Dispositive Power 7,823,207 shares
	11	Aggregate Amount Beneficially Owned by Each Reporting Person 7,823,207 shares
12	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) <input type="checkbox"/>	
13	Percent of Class Represented by Amount in Row (11) 15.39%²	
14	Type of Reporting Person (See Instructions) HC, IN	

² The reporting person is the beneficial owner of 7,823,207 shares of the Issuer's Ordinary Shares which constitute approximately 15.32% of the class outstanding. The percentage calculation assumes that there are currently 50,818,370 outstanding shares of Ordinary Shares of the Issuer, based on the Issuer's Form 8-K as filed with the Securities and Exchange Commission ("SEC") on August 16, 2021 and giving effect to 47,820 vested stock options (right to buy) held by Dr. Peter Kolchinsky for the benefit of RA Capital.

1	Names of Reporting Persons. Rajeev Shah	
2	Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC Use Only	
4	Source of Funds (See Instructions): AF	
5	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e): <input type="checkbox"/>	
6	Citizenship or Place of Organization. United States	
7	Sole Voting Power 0 shares	
Number of Shares Beneficially Owned by Each Reporting Person With	8	Shared Voting Power 7,823,207 shares
	9	Sole Dispositive Power 0 shares
	10	Shared Dispositive Power 7,823,207 shares
	11	Aggregate Amount Beneficially Owned by Each Reporting Person 7,823,207 shares
12	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) <input type="checkbox"/>	
13	Percent of Class Represented by Amount in Row (11) 15.39%³	
14	Type of Reporting Person (See Instructions) HC, IN	

³ The reporting person is the beneficial owner of 7,823,207 shares of the Issuer's Ordinary Shares which constitute approximately 15.32% of the class outstanding. The percentage calculation assumes that there are currently 50,818,370 outstanding shares of Ordinary Shares of the Issuer, based on the Issuer's Form 8-K as filed with the Securities and Exchange Commission ("SEC") on August 16, 2021 and giving effect to 47,820 vested stock options (right to buy) held by Dr. Peter Kolchinsky for the benefit of RA Capital.

1	Names of Reporting Persons. RA Capital Healthcare Fund, L.P.	
2	Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC Use Only	
4	Source of Funds (See Instructions): AF	
5	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e): <input type="checkbox"/>	
6	Citizenship or Place of Organization. United States	
7	Sole Voting Power 0 shares	
Number of Shares Beneficially Owned by Each Reporting Person With	8	Shared Voting Power 7,775,207 shares
	9	Sole Dispositive Power 0 shares
	10	Shared Dispositive Power 7,775,207 shares
	11	Aggregate Amount Beneficially Owned by Each Reporting Person 7,775,207 shares
12	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) <input type="checkbox"/>	
13	Percent of Class Represented by Amount in Row (11) 15.30%⁴	
14	Type of Reporting Person (See Instructions) PN	

⁴ The reporting person is the beneficial owner of 7,775,207 shares of the Issuer's Ordinary Shares which constitute approximately 15.30% of the class outstanding. The percentage calculation assumes that there are currently 50,818,370 outstanding shares of Ordinary Shares of the Issuer, based on the Issuer's Form 8-K as filed with the Securities and Exchange Commission ("SEC") on August 16, 2021 and giving effect to 47,820 vested stock options (right to buy) held by Dr. Peter Kolchinsky for the benefit of RA Capital.

SCHEDULE 13D

Item 1. Security and Issuer

This Amendment No. 3 amends and supplements the statement on Schedule 13D originally filed with the Securities and Exchange Commission (the "SEC") on November 27, 2015, as amended by Amendment No. 1 filed on November 15, 2017 and by Amendment No. 2 filed on January 28, 2019 (the "Statement") by RA Capital Management, LLC and Dr. Kolchinsky with respect to Ordinary Shares (the "Ordinary Shares"), of Wave Life Sciences Ltd., a Singapore public limited company (the "Issuer"). Unless otherwise defined herein, capitalized terms used in this Amendment No. 3 shall have the meanings ascribed to them in the initial Statement.

Item 2. Identity and Background

Item 2 of the Statement is hereby amended and supplemented as follows:

(a) This Amendment No. 3 is being filed by RA Capital Management, L.P. ("RA Capital"), Peter Kolchinsky, Rajeev Shah, and RA Capital Healthcare Fund, L.P. (the "Fund"). RA Capital, Dr. Kolchinsky, Mr. Shah, and the Fund are collectively referred to herein as the "Reporting Persons." On January 28, 2019 RA Capital Management, LLC, a Massachusetts limited liability corporation (the "Predecessor Adviser"), was the general partner of the Fund. On November 1, 2019, the Predecessor Adviser was replaced as general partner of the Fund by RA Capital Healthcare Fund GP, LLC and was restructured to become RA Capital. The general partner of RA Capital is RA Capital Management GP, LLC, of which Dr. Kolchinsky and Mr. Shah are the controlling persons. As the investment adviser to the Fund and the Account, RA Capital may be deemed a beneficial owner, for purposes of Section 13(d) of the Act, of any securities of the Issuer owned by the Fund or the Account. RA Capital, Dr. Kolchinsky, and Mr. Shah disclaim ownership of the securities reported in this Statement other than for the purpose of determining their obligations under Section 13(d) of the Act, and the filing of the Statement shall not be deemed an admission that either RA Capital, Dr. Kolchinsky, or Mr. Shah is or was 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 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 3. Source and Amount of Funds or Other Consideration

Item 3 of the Statement is hereby amended and supplemented as follows:

Dr. Peter Kolchinsky was issued 10,500 Share Options (right to buy) pursuant to the Non-Employee Director Compensation Policy. This option vested as to 100% of the shares on the earlier of the Company's 2021 Annual general meeting or August 18, 2021. This option was granted on August 18, 2020.

Item 4. Purpose of Transaction

Item 4 is hereby supplemented as follows:

The Reporting Persons acquired the Ordinary Shares referred to in Item 3 for investment purposes and not with an intent, purpose or effect of changing control of the Issuer.

Item 5. Interest in Securities of the Issuer

(a) and (b) See Items 7-11 of the cover pages and Item 2 above.

(c) The following table lists the Reporting Persons' transactions in Common Stock that were effected during the sixty day period prior to the filing of this Schedule 13D:

Transaction	Date	No. Shares	Price
Right to buy	10-August-2021	10,500	\$9.13

(d) Not applicable.

(e) Not applicable.

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer

Item 6 of the Statement is hereby amended and supplemented as follows:

Equity awards

Dr. Peter Kolchinsky ("Dr. Kolchinsky"), a Managing Partner at RA Capital, is a member of the Board of Directors of the Issuer. From time to time, Dr. Kolchinsky may receive stock options or other awards of equity-based compensation pursuant to the Issuer's compensation arrangements for non-employee directors. Pursuant to an agreement with RA Capital, Dr. Kolchinsky is obligated to transfer any securities issued under any such stock options or other awards, or the economic benefit thereof, to RA Capital.

Item 7. Material to Be Filed as Exhibits

Item 7 of the Statement is hereby amended and supplemented as follows:

Exhibit 1 Joint Filing Agreement by and among the Reporting Persons, dated as of August 18, 2021 (filed herewith).

SIGNATURES

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.

Dated: August 18, 2021

RA CAPITAL MANAGEMENT, L.P.

By: /s/ Peter Kolchinsky
Name: Peter Kolchinsky
Title: Authorized Signatory

PETER KOLCHINSKY

/s/ Peter Kolchinsky

RAJEEV SHAH

/s/ Rajeev Shah

RA CAPITAL HEALTHCARE FUND, L.P.

By: RA Capital Healthcare Fund GP, LLC
Its: General Partner

By: /s/ Peter Kolchinsky
Name: Peter Kolchinsky
Title: Manager

Exhibit 1

JOINT FILING AGREEMENT

This Joint Filing Agreement, dated as of August 12, 2021, is by and among RA Capital Management, L.P., Peter Kolchinsky, Rajeev Shah, and RA Capital Healthcare Fund, L.P. (the foregoing are collectively referred to herein as the "Filers").

Each of the Filers may be required to file with the United States Securities and Exchange Commission a statement on Schedule 13G and/or 13D with respect to Common Stock, par value \$0.0001 per share of Icosavax, Inc. beneficially owned by them from time to time.

Pursuant to and in accordance with Rule 13(d)(1)(k) promulgated under the Securities Exchange Act of 1934, as amended, the Filers hereby agree to file a single statement on Schedule 13G and/or 13D (and any amendments thereto) on behalf of each of such parties, and hereby further agree to file this Joint Filing Agreement as an exhibit to such statement, as required by such rule.

This Joint Filing Agreement may be terminated by any of the Filers upon one week's prior written notice or such lesser period of notice as the Filers may mutually agree.

Executed and delivered as of the date first above written.

RA CAPITAL MANAGEMENT, L.P.

By: /s/ Peter Kolchinsky
Name: Peter Kolchinsky
Title: Authorized Signatory

PETER KOLCHINSKY

/s/ Peter Kolchinsky

RAJEEV SHAH

/s/ Rajeev Shah

RA CAPITAL HEALTHCARE FUND, L.P.

By: RA Capital Healthcare Fund GP, LLC
Its: General Partner

By: /s/ Peter Kolchinsky
Name: Peter Kolchinsky
Title: Manager
