

OMB APPROVAL	
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STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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

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* <u>RA CAPITAL MANAGEMENT, L.P.</u> (Last) (First) (Middle) 200 BERKELEY STREET, 18TH FLOOR (Street) BOSTON MA 02116 (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>Wave Life Sciences Ltd. [WVE]</u>	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director <input checked="" type="checkbox"/> 10% Owner Officer (give title below) Other (specify below)
	3. Date of Earliest Transaction (Month/Day/Year) 08/15/2022	
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 Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			

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	(A)	(D)	Date Exercisable	Expiration Date						Title
Share Option (right to buy)	\$3.5	08/15/2022		A		21,000		(2)	08/15/2027	Ordinary Shares	21,000	\$0	21,000	I	See Footnotes ⁽¹⁾ (2)(3)

1. Name and Address of Reporting Person*
RA CAPITAL MANAGEMENT, L.P.
 (Last) (First) (Middle)
 200 BERKELEY STREET, 18TH FLOOR
 (Street)
 BOSTON MA 02116
 (City) (State) (Zip)

1. Name and Address of Reporting Person*
RA Capital Healthcare Fund LP
 (Last) (First) (Middle)
 200 BERKELEY STREET, 18TH FLOOR
 (Street)
 BOSTON MA 02116
 (City) (State) (Zip)

1. Name and Address of Reporting Person*
Kolchinsky Peter
 (Last) (First) (Middle)
 C/O RA CAPITAL MANAGEMENT, L.P.
 200 BERKELEY STREET, 18TH FLOOR
 (Street)
 BOSTON MA 02116
 (City) (State) (Zip)

1. Name and Address of Reporting Person*

[Shah Rajeev M.](#)

(Last) (First) (Middle)

[C/O RA CAPITAL MANAGEMENT, L.P.](#)
[200 BERKELEY STREET, 18TH FLOOR](#)

(Street)

[BOSTON](#) [MA](#) [02116](#)

(City)

(State)

(Zip)

Explanation of Responses:

1. RA Capital Management, L.P. (the "Adviser") is the investment manager for the RA Capital Healthcare Fund, L.P. (the "Fund"). The general partner of the Adviser is RA Capital Management GP, LLC (the "Adviser GP"), of which Dr. Peter Kolchinsky and Mr. Rajeev Shah are the managing members. The Adviser, the Adviser GP, Dr. Kolchinsky, and Mr. Shah disclaim beneficial ownership of any of the reported securities, except to the extent of their pecuniary interest therein.
2. All shares subject to the option vest 100% on the first to occur of (i) August 15, 2023 or (ii) the Issuer's 2023 annual general meeting.
3. Under Dr. Kolchinsky's arrangement with the Adviser, Dr. Kolchinsky holds the options for the benefit of the Fund. Dr. Kolchinsky is obligated to turn over to the Adviser any net cash or stock received upon exercise of the option, which will offset advisory fees owed by the Fund to the Adviser. The Reporting Persons therefore disclaim beneficial ownership of the option and underlying common stock except to the extent of their pecuniary interest.

Remarks:

Dr. Kolchinsky serves on the Issuer's board of directors.

[/s/ Peter Kolchinsky, Manager](#)
[of RA Capital Management, L.P.](#) [08/17/2022](#)

[/s/ Peter Kolchinsky, Manager](#)
[of RA Capital Healthcare Fund](#)
[GP, LLC, the General Partner of](#) [08/17/2022](#)
[RA Capital Healthcare Fund,](#)
[L.P.](#)

[/s/ Peter Kolchinsky,](#) [08/17/2022](#)
[individually](#)

[/s/ Rajeev Shah, individually](#) [08/17/2022](#)

** 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.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.