

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

☒ Check this box to indicate that a transaction was made pursuant to a contract, instruction or written plan for the purchase or sale of equity securities of the issuer that is intended to satisfy the affirmative defense conditions of Rule 10b5-1(c). See Instruction 10.

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

OMB APPROVAL	
OMB Number:	3235-0287
Estimated average burden hours per response:	0.5

1. Name and Address of Reporting Person* <u>Wagner Heidi L</u> (Last) (First) (Middle) <u>C/O WAVE LIFE SCIENCES, INC.,</u> <u>733 CONCORD AVE.</u> (Street) <u>CAMBRIDGE MA 02138</u> (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>Wave Life Sciences, Inc. [WVE]</u> Foreign Trading Symbol	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) ☒ Director 10% Owner Officer (give title below) Other (specify below)
	3. Date of Earliest Transaction (Month/Day/Year) <u>08/11/2026</u>	
	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			
Common Stock	08/11/2026		M ⁽¹⁾		7,000	A	\$5.97	51,930	D	
Common Stock	08/11/2026		S ⁽¹⁾		7,000	D	\$6.01	44,930	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	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares				
Stock Option (right to buy)	\$5.97	08/11/2026		M ⁽¹⁾			7,000	(2)	08/16/2026	Ordinary Shares	7,000	\$0.00	0	D	

Explanation of Responses:

1. The option exercise and sales reported in this Form 4 were effected pursuant to a Rule 10b5-1 trading plan adopted by the reporting person on March 6, 2026.
2. These stock options are fully vested.

Remarks:

On August 7, 2026, Wave Life Sciences, Inc., a Delaware corporation, became the successor of Wave Life Sciences Ltd., a company organized under the laws of the Republic of Singapore ("Wave-Singapore"), pursuant to a scheme of arrangement under Singapore law under which all issued ordinary shares in the capital of Wave-Singapore were exchanged on a one-for-one basis for shares of common stock of Wave Life Sciences, Inc. (the "Redomiciliation"). The Redomiciliation had the effect of changing Wave-Singapore's domicile, but did not alter the proportionate interests of securityholders. Exhibit 24.1 - Power of Attorney

/s/ Heidi L. Wagner08/13/2026

** Signature of Reporting PersonDate

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.

POWER OF ATTORNEY

Know all by these presents, that the undersigned hereby constitutes and appoints Linda Rockett, Paul B. Bolno and Lindsay Levine of Wave Life Sciences, Inc. (the "Company") and John T. Rudy, Esq., Nishant M. Dharia, Esq., Samantha M. Silver, Esq., Patricia Garza Gonzalez, Esq., Maura Foley, Robyn Frattali, Erber Hernandez, Autumn Mays and Christopher Brown of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., signing singly, with full power of substitution, the undersigned's true and lawful attorney-in-fact to:

(1) prepare, execute in the undersigned's name and on the undersigned's behalf, and submit to the U.S. Securities and Exchange Commission (the "SEC") a Form ID, including amendments thereto, and any other documents necessary or appropriate to obtain codes and passwords enabling the undersigned to make electronic filings with the SEC of reports required by Section 16(a) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or any rule or regulation of the SEC;

(2) if directed by the undersigned, act as an account administrator for the undersigned's Electronic Data Gathering and Retrieval ("EDGAR") system account, including: (i) appoint, remove and replace account administrators, account users, technical administrators and delegated entities; (ii) maintain the security of the undersigned's EDGAR account, including modification of access codes; (iii) maintain, modify and certify the accuracy of information on the undersigned's EDGAR account dashboard; (iv) act as the EDGAR point of contact with respect to the undersigned's EDGAR account; and (v) any other actions contemplated by Rule 10 of Regulation S-T with respect to account administrators;

(3) act as a delegated administrator for the undersigned's EDGAR account, including: (i) appoint, remove and replace delegated account administrators and users; (ii) maintain the security of the undersigned's EDGAR account; and (iii) any other actions contemplated by Rule 10 of Regulation S-T with respect to delegated entities;

(4) obtain, as the undersigned's representative and on the undersigned's behalf, information regarding transactions in the Company's equity securities from any third party, including the Company and any brokers, dealers, employee benefit plan administrators and trustees, and the undersigned hereby authorizes any such third party to release any such information to the attorney-in-fact;

(5) cause the Company to accept a delegation of authority from any of the undersigned's EDGAR account administrators and, pursuant to that delegation, authorize the Company's EDGAR account administrators to appoint, remove or replace users for the undersigned's EDGAR account;

(6) do and perform any and all acts for and on behalf of the undersigned which may be necessary or desirable to complete and execute any such forms and authentication documents;

(7) execute for and on behalf of the undersigned, in the undersigned's capacity as an officer, director and/or 10% shareholder of the Company, Forms 3, 4 and 5 in accordance with Section 16(a) of the Exchange Act and the rules thereunder;

(8) do and perform any and all acts for and on behalf of the undersigned which may be necessary or desirable to complete and execute any such Form 3, 4 or 5 and timely file such form with the SEC and any stock exchange or similar authority; and

(9) take any other action of any type whatsoever in connection with the foregoing which, in the opinion of such attorney-in-fact, may be of benefit to, in the best interest of, or legally required by, the undersigned, it being understood that the documents executed by such attorney-in-fact, on behalf of the

undersigned pursuant to this Power of Attorney, shall be in such form and shall contain such terms and conditions as such attorney-in-fact may approve in such attorney-in-fact's discretion.

The undersigned hereby grants to each such attorney-in-fact full power and authority to do and perform any and every act and thing whatsoever requisite, necessary, or proper to be done in the exercise of any of the rights and powers herein granted, as fully to all intents and purposes as the undersigned might or could do if personally present, with full power of substitution or revocation, hereby ratifying and confirming all that such attorney-in-fact, or such attorney-in-fact's substitute or substitutes, shall lawfully do or cause to be done by virtue of this Power of Attorney and the rights and powers herein granted. The undersigned acknowledges that the foregoing attorneys-in-fact, in serving in such capacity at the request of the undersigned, are not assuming, nor is the Company assuming, any of the undersigned's responsibilities to comply with Section 16 of the Exchange Act.

This Power of Attorney shall remain in full force and effect until the undersigned is no longer required to file Forms 3, 4 and 5 with respect to the undersigned's holdings of and transactions in securities issued by the Company, unless earlier revoked by the undersigned in a signed writing delivered to the foregoing attorneys-in-fact.

IN WITNESS WHEREOF, the undersigned has caused this Power of Attorney to be executed this 4 day of August, 2026.

/s/ Heidi L. Wagner
Signature

Heidi L. Wagner
Print Name
