FORM 3

# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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response

## INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF **SECURITIES**

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 McMinn	Address of Rep	orting Person <sup>*</sup>	2. Date of Requiring (Month/Da 12/18/20	Statement y/Year)	3. Issuer Name and Ticker or Trading Symbol Neurogene Inc. [ NGNE ]					
(Last) (First) (Middle) C/O NEUROGENE INC. 535 W 24TH STREET, 5TH FLOOR  (Street) NEW YORK NY 10011  (City) (State) (Zip)				4. Relationship of Reporting Person(s) to Issuer (Check all applicable)  X Director 10% Ow X Officer (give title below) below)  Chief Executive Officer		Owner (specify )	5. If Amendment, Date of Original Filed (Month/Day/Year)  6. Individual or Joint/Group Filing (Check Applicable Line)  X Form filed by One Reporting Person Form filed by More than One Reporting Person			
Table I - Non-Derivative Securities Beneficially Owned										
1. Title of Security (Instr. 4)				2. Amount of Securities Beneficially Owned (Instr. 4)	Form: (D) or I			. Nature of Indirect Beneficial Ownership (Instr. 5)		
Common Stock					1,250,359(1)(2)		D			
Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)										
			2. Date Exercisable and Expiration Date (Month/Day/Year)		3. Title and Amount of Securitie Underlying Derivative Security (Instr. 4)		4. Conve or Exe	rcise	se Form:	6. Nature of Indirect Beneficial Ownership (Instr.
		Date Exercisable	Expiration Date	Title	Amount or Number of Shares	Price of Derivative Security		Direct (D) or Indirect (I) (Instr. 5)	5)	
Stock Option	on (Right to B	Buy)	(3)	10/15/2025	Common Stock	18,556	11.	79	D	
Stock Option	on (Right to B	Buy)	(4)	09/22/2026	Common Stock	756	25.	32	D	
Stock Option	Stock Option (Right to Buy)		(5)	03/08/2028	Common Stock	37,800	20.22		D	
Stock Option (Right to Buy)		(6)	03/10/2024	Common Stock	5,369	6.	4	D		
Stock Option (Right to Buy)		Buy)	(7)	03/10/2024	Common Stock	1,718	6.	4	D	

### **Explanation of Responses:**

- 1. Effective as of December 18, 2023 (the "Effective Time"), a wholly-owned subsidiary of Neoleukin Therapeutics, Inc. ("Neoleukin") merged (the "Merger") with and into Neurogene Inc. ("Neurogene") resulting in, among other things, Neurogene becoming a wholly-owned subsidiary of Neoleukin. At the Effective Time, Neoleukin effected a name change to "Neurogene Inc." (hereinafter, the "Issuer").
- 2. Represents the number of shares of common stock of the Issuer received by the Reporting Person in the Merger in exchange for the shares of Neurogene held by the Reporting Person prior to the Merger. Each share of Neurogene capital stock held at the Effective Time was exchanged for 0.0756 shares of the Issuer's common stock, which gives effect to the reverse stock split of common stock effected by the Issuer immediately prior to the closing of the Merger and the Merger exchange ratio.
- 3. This option represents a right to purchase 18,556 shares of the Issuer's common stock. 25% of this option vested on October 7, 2021, with the remainder vesting in equal monthly installments through October 7, 2024, subject to the Reporting Person's continued service to the Issuer on each such vesting date.
- 4. This option represents a right to purchase 756 shares of the Issuer's common stock. 25% of this option vested on September 23, 2022, with the remainder vesting in equal monthly installments through September 23, 2025, subject to the Reporting Person's continued service to the Issuer on each such vesting date.
- 5. This option represents a right to purchase 37,800 shares of the Issuer's common stock. 25% of this option will vest on March 9, 2024, with the remainder vesting in equal monthly installments through March 9, 2027, subject to the Reporting Person's continued service to the Issuer on each such vesting date.
- 6. This option represents a right to purchase 5,369 shares of the Issuer's common stock and is fully vested.
- 7. This option represents a right to purchase 1,718 shares of the Issuer's common stock and is fully vested.

#### Remarks:

Exhibit 24 - Power of Attorney

/s/ Christine Mikail, as attorney-in-fact for Rachel 12/26/2023 McMinn

\*\* Signature of Reporting Person

Date

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

- $^{\star}$  If the form is filed by more than one reporting person, see Instruction 5 (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 each of Christine Mikail, Ryan A. Murr and Branden C. Berns, and any of their substitutes, signing singly, as 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 document necessary or appropriate to obtain codes, passwords, and passphrases enabling the undersigned to make electronic filings with the SEC of reports require by the Securities Exchange Act of 1934 or any rule or regulation of the SEC;
- 2. execute for and on behalf of the undersigned, in the undersigned's capacity as a director, officer and/or ten percent stockholder of Neurogene Inc. (the "Company"), Forms 3, 4, and 5 in accordance with Section 16(a) of the Securities Exchange Act of 1934 and the rules thereunder;
- 3. 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, complete and execute any amendment or amendments thereto, and timely file such form with the SEC and any securities exchange or similar authority; and
- 4. 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 each 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 also ratifies hereby any action previously taken by each attorney-in-fact that would have been authorized by this power of attorney if it has been in effect at the time such action was taken. The undersigned acknowledges that each attorney-in-fact, in serving in such capacity at the request of the undersigned, is not assuming, nor is the Company assuming, any of the undersigned's responsibilities to comply with Section 16 of the Securities Exchange Act of 1934, as amended.

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 each of the foregoing attorneys-in-fact.

IN WITNESS WHEREOF, the undersigned has caused this Power of Attorney to be executed as of September 15, 2023.

By: /s/ Rachel McMinn

Name: Rachel McMinn