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

SCHEDULE 14A
**Proxy Statement Pursuant to Section 14(a) of the
Securities Exchange Act of 1934
(Amendment No.)**

Filed by the Registrant
Filed by a Party other than the Registrant

Check the appropriate box:

- Preliminary Proxy Statement
 - Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))
 - Definitive Proxy Statement
 - Definitive Additional Materials
 - Soliciting Material under §240.14a-12
-

Neurogene Inc.

(Name of Registrant as Specified In Its Charter)
(Name of Person(s) Filing Proxy Statement if other than the Registrant)

Payment of Filing Fee (Check all boxes that apply):

- No fee required.
 - Fee paid previously with preliminary materials.
 - Fee computed on table in exhibit required by Item 25(b) per Exchange Act Rules 14a-6(i)(1) and 0-11.
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April 16, 2026

Dear Stockholder:

You are cordially invited to attend the 2026 Annual Meeting of Stockholders of Neurogene Inc., a Delaware corporation (the “Company”). The meeting is expected to be held virtually at 9:00 a.m. Eastern Time on June 3, 2026. You will be able to virtually attend the meeting, submit your questions and comments, and vote your shares at the meeting by visiting www.virtualshareholdermeeting.com/NGNE2026. We believe that a virtual meeting facilitates stockholder participation, improves communication and saves on the expenses traditionally incurred for in-person annual meetings.

We have elected to deliver our proxy materials to our stockholders over the Internet and will mail to our stockholders a Notice of Internet Availability of Proxy Materials containing instructions on how to access our Proxy Statement and our 2025 annual report to stockholders. The Notice of Internet Availability of Proxy Materials also provides instructions on how to vote by telephone or Internet and includes instructions on how to receive a paper copy of the proxy materials by mail. You may also find copies of these items online at ir.neurogene.com/financial-information/sec-filings.

The matters to be voted on are described in the accompanying Notice of 2026 Annual Meeting of Stockholders and Proxy Statement. **Our Board of Directors recommends that you vote in accordance with each of its recommendations regarding the proposals listed in the Notice of 2026 Annual Meeting of Stockholders and described in the accompanying Proxy Statement.**

Your vote is important. Whether or not you expect to attend the Annual Meeting, we encourage you to read the Proxy Statement and vote by Internet or, if you requested paper copies of the proxy materials, by telephone or by submitting your signed and dated proxy card to ensure your representation at the Annual Meeting. For specific instructions on how to vote your shares, please refer to the section entitled “Questions and Answers about the Proxy Materials and Voting” beginning on page 1 of the proxy statement and the instructions on the Notice of Internet Availability of Proxy Materials. Providing voting instructions or returning your proxy card in advance of the meeting will not prevent you from voting on the website during the meeting but will ensure that your vote is counted if you are unable to attend.

Sincerely,

A handwritten signature in blue ink that reads "Rachel McMinn".

Rachel McMinn, Ph.D.

Executive Chair,
Founder and Chief Executive Officer



535 W. 24th Street, 5th Floor, New York, NY 10011

**NOTICE OF 2026 ANNUAL MEETING OF STOCKHOLDERS
To Be Held Wednesday, June 3, 2026, 9:00 a.m. (Eastern Time)
Virtual Meeting Only — No Physical Meeting Location**

To Our Stockholders:

NOTICE IS HEREBY GIVEN that the 2026 Annual Meeting of Stockholders ("Annual Meeting") of Neurogene Inc., a Delaware corporation (the "Company"), will be held in a virtual-only format, via live webcast, on Wednesday, June 3, 2026 at 9:00 a.m. (Eastern Time). The purpose of this meeting is to consider and vote upon the following matters:

1. To elect Robert Baffi, Ph.D. and Rohan Palekar as Class III directors to our Board of Directors to serve until the 2029 annual meeting of stockholders and until their respective successors are elected and qualified;
2. To approve on an advisory (non-binding) basis the compensation of the Company's named executive officers;
3. To ratify on an advisory (non-binding) basis the appointment of Deloitte & Touche LLP as the Company's independent registered public accounting firm for the year ending December 31, 2026;
4. To hold an advisory (non-binding) vote on whether future non-binding advisory votes on the compensation paid by the Company to its named executive officers should be held every one, two or three years; and
5. To transact any other matters that may properly come before the Annual Meeting or any adjournments or postponements thereof.

The foregoing items of business are more fully described in the proxy statement accompanying this Notice of 2026 Annual Meeting of Stockholders (the "Proxy Statement"). We also will transact any other business that may properly come before the Annual Meeting, but we are not aware of any such additional matters.

Only stockholders of record at the close of business on April 7, 2026 are entitled to notice of, and to vote at, the Annual Meeting or any adjournment or postponement of the meeting. The accompanying Proxy Statement and the proxy card were either made available to you online or mailed to you beginning on or about April 16, 2026.

To facilitate stockholder participation and save on expenses associated with conducting an in-person annual meeting, the Annual Meeting will be held in a virtual meeting format only. You will be able to virtually attend the meeting, submit your questions and comments, and vote your shares at the meeting by visiting www.virtualshareholdermeeting.com/NGNE2026.

In the event of a technical malfunction or other situation that the meeting chair determines may affect the ability of the Annual Meeting to satisfy the requirements for a meeting of stockholders to be held by means of remote communication under the Delaware General Corporation Law, or that otherwise makes it advisable to adjourn the Annual Meeting, the meeting chair or secretary will convene the meeting at 10:00 a.m. Eastern Time on the date specified above and at the Company's address specified above solely for the purpose of adjourning the meeting to reconvene at a date, time and physical or virtual location announced by the meeting chair or secretary. Under either of the foregoing circumstances, we will post information regarding the announcement on the Investor page of the Company's website at <https://ir.neurogene.com>.

Whether or not you expect to attend the Annual Meeting, we encourage you to read the Proxy Statement and vote as soon as possible, so that your shares may be represented at the meeting. For specific instructions on how to vote your shares, please refer to the section entitled "Questions and Answers About the Proxy Materials and Voting" beginning on page 1 of the accompanying Proxy Statement and the instructions on the Notice of Internet Availability of Proxy Materials.

Donna M. Cochener
SVP, General Counsel and Corporate Secretary

April 16, 2026

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LEGAL MATTERS

Company References. Unless the context otherwise requires, references in the proxy statement to “Neurogene,” “we,” “us,” “our,” or the “Company” refer to Neurogene Inc. and its consolidated subsidiaries. From August 2019 until December 18, 2023, the Company was known as Neoleukin Therapeutics, Inc. (“Neoleukin”). On December 18, 2023, a wholly-owned subsidiary of Neoleukin merged with Neurogene Inc., a Nevada corporation (“Neurogene OpCo”) with Neurogene OpCo continuing as the surviving entity and the name of the Delaware parent Company was changed to Neurogene Inc. (the “Merger”).

Information about solicitation and voting. The accompanying proxy is solicited on behalf of the Board of Directors (the “Board”) of Neurogene Inc. for use at the Company’s 2026 Annual Meeting of Stockholders (the “Annual Meeting” or “meeting”) to be held on June 3, 2026 at 9:00 a.m. Eastern Time as a virtual-only meeting which can be accessed at www.virtualshareholdermeeting.com/NGNE2026.

Internet Availability of Proxy Materials. Under rules adopted by the U.S. Securities and Exchange Commission (“SEC”), we are furnishing proxy materials to our stockholders primarily via the internet, instead of mailing printed copies of those materials to each stockholder. On or about April 16, 2026, we expect to send our stockholders a Notice of Internet Availability of Proxy Materials (“Notice”) containing instructions on how to access our proxy materials, including our Proxy Statement and our 2025 annual report to stockholders. The Notice also provides instructions on how to vote by Internet and includes instructions on how to receive a paper copy of the proxy materials by mail. If you prefer to receive printed proxy materials, please follow the instructions included in the Notice.

Important Notice Regarding the Availability of Proxy Materials for the 2026 Annual Meeting of Stockholders to Be Held on June 3, 2026. The Proxy Statement and Annual Report for the year ended December 31, 2025 are available at www.proxyvote.com.

Forward-Looking Statements. The Proxy Statement may contain “forward-looking statements” within the meaning of the “safe harbor” provisions of the Private Securities Litigation Reform Act of 1995, which statements are subject to substantial risks and uncertainties and are based on estimates and assumptions. All statements other than statements of historical fact included in the Proxy Statement, including statements about the Company’s Board of Directors, corporate governance practices and executive compensation program and equity compensation utilization, are forward-looking statements. In some cases, you can identify forward-looking statements by terms such as “may,” “might,” “will,” “objective,” “intend,” “should,” “could,” “can,” “would,” “expect,” “believe,” “design,” “estimate,” “predict,” “potential,” “plan” or the negative of these terms, and similar expressions intended to identify forward-looking statements. These statements involve known and unknown risks, uncertainties and other factors that could cause our actual results or outcomes to differ materially from the forward-looking statements expressed or implied in the Proxy Statement. Such risks, uncertainties and other factors include those risks described in “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in the Company’s most recent Annual Report on Form 10-K filed with the SEC and other subsequent documents we file with the SEC. The Company expressly disclaims any obligation to update or alter any statements whether as a result of new information, future events or otherwise, except as required by law.

Website References. Website references throughout this document are inactive textual references and provided for convenience only, and the content on the referenced websites is not incorporated herein by reference and does not constitute a part of the Proxy Statement.

Use of Trademarks. Neurogene is the trademark of Neurogene Inc. Other names and brands may be claimed as the property of others.



535 W 24th Street, 5th Floor, New York, NY 10011

**PROXY STATEMENT
FOR THE 2026 ANNUAL MEETING OF STOCKHOLDERS**

QUESTIONS AND ANSWERS ABOUT THE PROXY MATERIALS AND VOTING

What Is the Purpose of These Proxy Materials?

We are making these proxy materials available to you in connection with the solicitation of proxies by the Board for use at the 2026 Annual Meeting of Stockholders (the “Annual Meeting”) to be held virtually on June 3, 2026 at 9:00 a.m. Eastern Time, or at any other time following adjournment or postponement thereof. You are invited to participate in the Annual Meeting and to vote on the proposals described in this proxy statement (the “Proxy Statement”). The proxy materials are first being made available to our stockholders on or about April 16, 2026.

Why Did I Receive a Notice of Internet Availability?

Pursuant to SEC rules, we are furnishing the proxy materials to our stockholders primarily via the Internet instead of mailing printed copies. This process allows us to expedite our stockholders’ receipt of proxy materials, lower the costs of printing and mailing the proxy materials and reduce the environmental impact of our Annual Meeting. If you received a Notice, you will not receive a printed copy of the proxy materials unless you request one. The Notice provides instructions on how to access the proxy materials for the Annual Meeting via the Internet, how to request a printed set of proxy materials and how to vote your shares.

Why Are We Holding a Virtual Annual Meeting?

We have adopted a virtual meeting format for the Annual Meeting to provide a consistent experience to all stockholders regardless of geographic location. We believe this expands stockholder access, improves communications and lowers our costs while reducing the environmental impact of the meeting. In structuring our virtual Annual Meeting, our goal is to enhance rather than constrain stockholder participation in the meeting, and we have designed the meeting to provide stockholders with the same rights and opportunities to participate as they would have at an in-person meeting.

Who Can Vote?

Only stockholders of record at the close of business on April 7, 2026 (the “Record Date”) are entitled to notice of the Annual Meeting and to vote on the proposals described in this Proxy Statement. At the close of business on the Record Date, 15,615,786 shares of our common stock were issued and outstanding.

What Is the Difference between Holding Shares as a Registered Stockholder and as a Beneficial Owner?

Registered Stockholder: Shares Registered in Your Name

If your shares of common stock are registered directly in your name with our transfer agent, Broadridge Corporate Issuer Solutions, LLC, you are considered to be, with respect to those shares of common stock, the registered stockholder, and these proxy materials are being sent directly to you by us.

Beneficial Owner: Shares Registered in the Name of a Broker, Fiduciary or Custodian

If your shares of common stock are held by a broker, fiduciary or custodian, you are considered the beneficial owner of shares of common stock held in “street name,” and these proxy materials are being forwarded to you from that broker, fiduciary or custodian.

Under certain circumstances banks, brokers and other nominees are prohibited from exercising discretionary authority for beneficial owners who have not provided voting instructions to the bank, broker or other nominee, which is referred to as

a “broker non-vote”. In these cases, those shares will be counted for the purpose of determining whether a quorum is present, but will not be voted on any matters deemed non-routine. See also “What Happens If I Do Not Vote?” and “What Happens If I Sign and Return a Proxy Card or Otherwise Vote but Do Not Indicate Specific Choices?” below.

How Can I Participate in the Virtual Annual Meeting?

Stockholders of record as of the close of business on the Record Date are entitled to participate in and vote at the Annual Meeting. To participate in the Annual Meeting, including to vote and ask questions, stockholders of record should go to the meeting website at www.virtualshareholdermeeting.com/NGNE2026, enter the 16-digit control number found on your proxy card or Notice, and follow the instructions on the website. If your shares are held in street name and your voting instruction form or Notice indicates that you may vote those shares through www.proxyvote.com, then you may access, participate in and vote at the Annual Meeting with the 16-digit access code indicated on that voting instruction form or Notice. Otherwise, stockholders who hold their shares in street name should contact their bank, broker or other nominee (preferably at least five days before the Annual Meeting) and obtain a “legal proxy” in order to be able to attend, participate in or vote at the Annual Meeting.

We will endeavor to answer as many stockholder-submitted questions as time permits that comply with the Annual Meeting rules of conduct. We reserve the right to edit profanity or other inappropriate language and to exclude questions regarding topics that are not pertinent to meeting matters or Company business. If we receive substantially similar questions, we may group such questions together and provide a single response to avoid repetition.

The meeting webcast will begin promptly at 9:00 a.m. Eastern Time. Online check-in will begin approximately 15 minutes before then, and we encourage you to allow ample time for check-in procedures. If you experience technical difficulties during the check-in process or during the meeting, please call the number listed on the meeting website for technical support. Additional information regarding the rules and procedures for participating in the Annual Meeting will be set forth in our meeting rules of conduct, which stockholders can view during the meeting at the meeting website.

What Am I Voting on?

The proposals to be voted on at the Annual Meeting are as follows:

- (1) Election of two Class III director nominees to serve until the 2029 Annual Meeting of Stockholders (“Proposal 1”);
- (2) Approval, on a non-binding, advisory basis, of the compensation of the Company’s named executive officers (“Proposal 2”);
- (3) Ratification of the appointment of Deloitte & Touche LLP as the Company’s independent auditor for 2026 (“Proposal 3”); and
- (4) An advisory, non-binding vote on whether future non-binding advisory votes on the compensation paid by the Company to its named executive officers should be held every one, two or three years.

How Does the Board Recommend That I Vote?

The Board recommends that you vote your shares “**FOR**” each director nominee in Proposal 1, “**FOR**” Proposals 2 and 3, and “**ONE YEAR**” for Proposal 4.

What If Another Matter Is Properly Brought before the Annual Meeting?

As of the date of filing this Proxy Statement, the Board knows of no other matters that will be presented for consideration at the Annual Meeting. If any other matters are properly brought before the Annual Meeting, it is the intention of the persons named as proxies in the proxy card to vote on such matters in accordance with their best judgment.

How Many Votes Do I Have?

Each share of common stock you owned on the Record Date is entitled to one vote for each director candidate. You may NOT cumulate votes relating to the election of directors. For the other matters presented at this meeting, you are entitled to one vote for each share of common stock you owned on the Record Date.

What Does It Mean If I Receive More Than One Set of Proxy Materials?

If you receive more than one set of proxy materials, your shares may be registered in more than one name or held in different accounts. Please cast your vote with respect to each set of proxy materials that you receive to ensure that all of your shares are voted.

Please note that if you have more than one account through which you hold shares, you will receive more than one control number. The control number is used to vote your shares, and is also used to log on to the meeting website to virtually attend the meeting, which will allow you to vote the shares held in the account associated with that control number at the meeting. However, you will not be able to vote shares held in other accounts not associated with the control number you are using to log in to the virtual stockholder meeting. Therefore, it is important that you vote in advance for all of your accounts prior to the Annual Meeting so that all of your shares may be counted.

How Do I Vote?

Even if you plan to attend the Annual Meeting, we recommend that you also submit your vote as early as possible in advance so that your vote will be counted if you later decide not to, or are unable to, virtually attend the Annual Meeting.

Registered Stockholder: Shares Registered in Your Name

If you are the registered stockholder, you may vote your shares online during the virtual Annual Meeting (see “How Can I Participate in the Virtual Annual Meeting?” above) or by proxy in advance of the Annual Meeting by Internet (at www.proxyvote.com) or, if you requested paper copies of the proxy materials, by completing and mailing a proxy card or by telephone (at 800-690-6903).

Beneficial Owner: Shares Registered in the Name of a Broker, Fiduciary or Custodian

If you are the beneficial owner, you may vote your shares online during the virtual Annual Meeting (see “How Can I Participate in the Virtual Annual Meeting?” above) or you may direct your broker, fiduciary or custodian how to vote in advance of the Annual Meeting by following the instructions they provide.

What Happens If I Do Not Vote?

Registered Stockholder: Shares Registered in Your Name

If you are the registered stockholder and do not vote in one of the ways described above, your shares will not be voted at the Annual Meeting and will not be counted toward the quorum requirement.

Beneficial Owner: Shares Registered in the Name of a Broker, Fiduciary or Custodian

If you are the beneficial owner and do not direct your broker, fiduciary or custodian how to vote your shares, your broker, fiduciary or custodian will only be able to vote your shares with respect to proposals considered to be “routine.” Your broker, fiduciary or custodian is not entitled to vote your shares with respect to “non-routine” proposals, which we refer to as a “broker non-vote.” Whether a proposal is considered routine or non-routine is subject to stock exchange rules and final determination by the stock exchange. Even with respect to routine matters, some brokers are choosing not to exercise discretionary voting authority. As a result, we urge you to direct your broker, fiduciary or custodian how to vote your shares on all proposals to ensure that your vote is counted.

What Happens If I Sign and Return a Proxy Card or Otherwise Vote but Do Not Indicate Specific Choices?

Registered Stockholder: Shares Registered in Your Name

The shares represented by each signed and returned proxy will be voted at the Annual Meeting by the persons named as proxies in the proxy card in accordance with the instructions indicated on the proxy card. However, if you are the registered stockholder and sign and return your proxy card without giving specific instructions, the persons named as proxies in the proxy card will vote your shares in accordance with the recommendations of the Board. Your shares will be counted toward the quorum requirement.

Beneficial Owner: Shares Registered in the Name of a Broker, Fiduciary or Custodian

If you are the beneficial owner and do not direct your broker, fiduciary or custodian how to vote your shares, your broker, fiduciary or custodian will only be able to vote your shares with respect to proposals considered to be “routine.” Your broker, fiduciary or custodian is not entitled to vote your shares with respect to “non-routine” proposals, resulting in a broker non-vote with respect to such proposals.

Can I Change My Vote after I Submit My Proxy?

Registered Stockholder: Shares Registered in Your Name

If you are the registered stockholder, you may revoke your proxy at any time before the final vote at the Annual Meeting in any one of the following ways:

- (1) You may complete and submit a new proxy card, but it must bear a later date than the original proxy card;
- (2) You may submit new proxy instructions via telephone or the Internet;
- (3) You may send a timely written notice that you are revoking your proxy to our Corporate Secretary at the address set forth on the first page of this Proxy Statement; or
- (4) You may vote by attending the Annual Meeting virtually. However, your virtual attendance at the Annual Meeting will not, by itself, revoke your proxy.

Your last submitted vote is the one that will be counted.

Beneficial Owner: Shares Registered in the Name of a Broker, Fiduciary or Custodian

If you are the beneficial owner, you must follow the instructions you receive from your broker, fiduciary or custodian with respect to changing your vote.

What Is the Quorum Requirement?

The holders of a majority of the shares of common stock outstanding and entitled to vote at the Annual Meeting, either virtually or represented by proxy, must be present at the Annual Meeting to constitute a quorum. A quorum is required to transact business at the Annual Meeting.

Your shares will be counted toward the quorum only if you submit a valid proxy (or a valid proxy is submitted on your behalf by your broker, fiduciary or custodian) or if you attend the Annual Meeting virtually and vote. Abstentions and broker non-votes, if any, will be counted toward the quorum requirement. If there is no quorum, the chair of the Annual Meeting or the holders of a majority of shares of common stock present at the Annual Meeting, either virtually or represented by proxy, may adjourn the Annual Meeting to another time or date.

How Many Votes Are Required to Approve Each Proposal and How Are Votes Counted?

Votes will be counted by Broadridge Financial Solutions, the Inspector of Elections appointed for the Annual Meeting.

Proposal 1: Election of Directors

A nominee will be elected as a director at the Annual Meeting if the nominee receives a plurality of the votes cast "FOR" his or her election. "Plurality" means that the individuals who receive the highest number of votes cast "FOR" are elected as directors. Broker non-votes, if any, and votes that are withheld will not be counted as votes cast on the matter and will have no effect on the outcome of the election. Stockholders do not have cumulative voting rights for the election of directors.

Proposal 2: Non-Binding Advisory Vote on Executive Compensation

The affirmative vote of the holders of at least a majority of shares of common stock present or represented at the Annual Meeting and entitled to vote on the matter is required to approve this proposal. Abstentions will have the same effect as a vote "AGAINST" the matter. Broker non-votes, if any, will have no effect on the outcome of the matter.

Proposal 3: Ratification of Independent Auditor Appointment

The affirmative vote of the holders of at least a majority of shares of common stock present or represented at the Annual Meeting and entitled to vote on the matter is required to approve this proposal. Abstentions will have the same effect as a vote "AGAINST" the matter. Broker non-votes, if any, will have no effect on the outcome of the matter.

Proposal 4: Non-Binding Advisory Vote on Frequency of Future Non-Binding Advisory Votes on Executive Compensation

The affirmative vote of holders of at least a majority of shares of common stock present or represented at the Annual Meeting and entitled to vote on the matter is required to approve this proposal. Abstentions will have the same effect as a vote "AGAINST" the matter. Broker non-votes, if any, will have no effect on the outcome of the matter.

Who Is Paying for This Proxy Solicitation?

We will pay the costs associated with the solicitation of proxies, including the preparation, assembly, printing and mailing of the proxy materials. We may also reimburse brokers, fiduciaries or custodians for the cost of forwarding proxy materials to beneficial owners of shares of common stock held in "street name."

Our employees, officers and directors may solicit proxies in person or via telephone or the Internet. We will not pay additional compensation for any of these services.

When are Stockholder Proposals and Director Nominations Due for Next Year's Annual Meeting?

Stockholders who wish to submit proposals for inclusion in next year's proxy materials must submit such proposals in writing by December 18, 2026 to our Corporate Secretary at 535 W. 24th Street, 5th Floor, New York, NY 10011, and must comply with all applicable requirements of Rule 14a-8 promulgated under the Securities Exchange Act of 1934, as amended (the "Exchange Act"); provided, however, that if our 2027 Annual Meeting of Stockholders is held before May 4, 2027 or after July 3, 2027, then the deadline is a reasonable amount of time prior to the date we begin to print and mail our proxy statement for the 2027 Annual Meeting of Stockholders. A submission of a stockholder proposal does not guarantee that it will be included in the proxy materials.

If you wish to submit a proposal (including a director nomination) at the 2027 Annual Meeting of Stockholders (other than pursuant to Rule 14a-8 of the Exchange Act), the proposal must be received by our Corporate Secretary not later than the close of business on March 5, 2027 nor earlier than the close of business on February 3, 2027; provided, however, that if our 2027 Annual Meeting of Stockholders is held more than 30 days before or 60 days after the anniversary of the Annual Meeting, then the proposal must be received no earlier than the 120th day before the 2027 Annual Meeting and not later than the close of business on the later of the 90th day prior to such meeting or the 10th day following the date on which public announcement of the date of such meeting is first made. Any such director nomination or stockholder proposal must be a proper matter for stockholder action and must comply with the terms and conditions set forth in our Bylaws (which includes the timing and information required under Rule 14a-19 of the Exchange Act). If a stockholder fails to meet these deadlines or fails to satisfy the requirements of Rule 14a-4 of the Exchange Act, we may exercise discretionary voting authority under proxies we solicit to vote on any such proposal as we determine appropriate. We reserve the right to reject, rule out of order or take other appropriate action with respect to any nomination or proposal that does not comply with these and other applicable requirements.

How Can I Find out the Voting Results?

We expect to announce preliminary voting results at the Annual Meeting. Final voting results will be published in a Current Report on Form 8-K to be filed with the SEC within four business days after the Annual Meeting.

Who Can Help Answer Any Questions I May Have?

If you have any questions or require any assistance with voting your shares, or if you need additional copies of the proxy materials, please contact:

Neurogene Inc.
Attn: Corporate Secretary 535 W. 24th Street, 5th Floor
New York, NY 10011

PROPOSAL 1: ELECTION OF DIRECTORS

In accordance with our Certificate of Incorporation and Bylaws, the Board has fixed the number of directors constituting the Board at six. At the Annual Meeting, the stockholders will vote to elect the two Class III director nominees named in this Proxy Statement to serve until the 2029 Annual Meeting of Stockholders and until their successors are duly elected and qualified or until their earlier resignation or removal. Our Board has nominated Dr. Robert Baffi and Rohan Palekar for election to our Board. Dr. Baffi was initially appointed to the Board in December 2023 pursuant to the Merger, and prior to that served on the Board of Neurogene OpCo from September 2020 until December 2023, and Mr. Palekar joined the Board in March 2022.

Our director nominees have indicated that they are willing and able to serve as directors. However, if either of them becomes unable or, for good cause, unwilling to serve, proxies may be voted for the election of such other person as shall be designated by our Board, or the Board may decrease the size of the Board.

Information Regarding Director Nominees and Continuing Directors

Our Board is divided into three classes, with members of each class holding office for staggered three-year terms. There are currently two Class I directors, whose terms expire at the 2027 Annual Meeting of Stockholders; two Class II directors, whose terms expire at the 2028 Annual Meeting of Stockholders, and two Class III directors, who are up for election at this meeting for a term expiring at the 2029 Annual Meeting of Stockholders.

Biographical and other information regarding our director nominees and directors continuing in office, including the primary skills and experiences considered by our Nominating and Corporate Governance Committee (the “Nominating Committee”) in determining to recommend them as nominees, is set forth below.

Name	Class	Age (as of April 7)	Position
Rachel McMinn, Ph.D.	I	53	Executive Chair and Chief Executive Officer
Cory Freedland, Ph.D. ⁽¹⁾	I	50	Lead Independent Director
Robert Baffi, Ph.D. ⁽²⁾⁽³⁾	III	71	Director
Sarah B. Noonberg, M.D., Ph.D. ⁽²⁾	II	58	Director
Rohan Palekar ⁽¹⁾⁽²⁾	III	60	Director
Robert Keith Woods (“Keith Woods”) ⁽¹⁾⁽³⁾	II	58	Director

(1) Member of the Audit Committee

(2) Member of the Compensation Committee

(3) Member of the Nominating Committee

Class III Director Nominees

Robert Baffi, Ph.D. Dr. Baffi has served as a member of our Board since December 2023 and served as a member of the board of directors of Neurogene OpCo from September 2020 to December 2023. Dr. Baffi is a Venture Partner at Samsara BioCapital (“Samsara”), an investment company focused on the life sciences industry, which he joined in March 2021. Dr. Baffi had a 23-year tenure at BioMarin Pharmaceutical Inc. (Nasdaq: BMRN), a global biotechnology company, from May 2000 to March 2023, where he served as President of Global Manufacturing & Technical Operations from 2018 to 2020, was responsible for overseeing manufacturing, process development based on the baculovirus system, quality, logistics, engineering and analytical chemistry, and led the building of one of the first gene therapy manufacturing facilities of its kind, before he became Senior Advisor to the Chairman and Chief Executive Officer in 2021. Prior to BioMarin, Dr. Baffi served 14 years in a number of increasingly senior positions at Genentech, Inc., primarily in the functional area of quality control, as a Research Scientist at Cooper BioMedical, Inc. and as a Post-Doctoral Fellow at the Becton Dickinson Research Center. Dr. Baffi has contributed to the approval and commercial success of 28 products. Since 2024, Dr. Baffi has served as a member of the board of directors of Neuvivo, Inc., a venture-backed biotechnology company. Dr. Baffi is an emeritus member of the science advisory board of the National Institute for Bioprocessing Research & Training. Dr. Baffi served as a member of the board of directors of Mosaic ImmunoEngineering Inc. (OTMTKS: CPMV), a biotechnology company, from June 2021 until August 2025, and Bionic Sight, Inc., a biotechnology company, from 2020 until 2024. Dr. Baffi received his Ph.D., M. Phil. and B.S. in biochemistry from the City University of New York and his M.B.A. from Regis University.

We believe Dr. Baffi is qualified to serve on our Board because of his extensive education and investment, management, commercialization, operational and leadership experience in the life sciences sector.

Rohan Palekar. Rohan Palekar has served as a member of our Board since March 2022. Mr. Palekar served as Chief Executive Officer of 89bio, Inc., a biopharmaceutical company, from June 2018 until January 2026 and as a member of the board of directors from June 2018 until October 2025 when the company was acquired by Roche. Prior to 89bio, Mr. Palekar held various positions at Avanir Pharmaceuticals, Inc., a specialty pharmaceutical company, including the role of President and Chief Executive Officer of Avanir from December 2015 to July 2017, where he led the company following its acquisition by Otsuka Pharmaceutical Co., Ltd. in 2015. Prior to the acquisition, Mr. Palekar served as Executive Vice President and Chief Operating Officer in 2015 and as Senior Vice President and Chief Commercial Officer of Avanir from March 2012 to March 2015. Mr. Palekar has also held prior executive roles, including Chief Commercial Officer for Medivation, Inc., and various senior commercial and strategic management roles during his 16 years at Johnson & Johnson (NYSE: JNJ). Mr. Palekar served as a trustee for Aim High for High School, a non-profit educational institution, from 2018 until 2023 and chair of the board of trustees from 2021 to 2023. Mr. Palekar earned his M.B.A. from the Tuck School of Business at Dartmouth College, his B.Com. in Accounting from the University of Mumbai and his L.L.B. from the University of Mumbai. Mr. Palekar is also a certified Chartered Accountant and a Cost and Management Accountant.

We believe Mr. Palekar is qualified to serve on our Board because of his operational experience in the biopharmaceutical industry as well as his senior management and leadership experience.

Class I Directors Continuing in Office

Cory Freedland, Ph.D. Dr. Freedland has served as a member of our Board since December 2023 and as Lead Independent Director since January 2026. He also served on the board of directors of Neurogene OpCo from February 2019 to December 2023. Dr. Freedland is an independent consultant for biopharmaceutical companies. He was previously a Partner at Samsara BioCapital (“Samsara”), an investment company focused on the life sciences industry, from October 2017 until May 2025. Dr. Freedland has over 20 years of experience, leading multiple successful life science investments in his role. Prior to Samsara, Dr. Freedland was a Principal at Sofinnova Ventures, a biopharmaceutical venture capital firm, where he focused on biopharmaceutical investments. He played a central role in Sofinnova’s investments in Civitas Therapeutics, Inc. (acquired by Acorda Therapeutics, Inc.), Principia Biopharma, Spark Therapeutics, Inc. (acquired by Roche), Ziarco Pharma Ltd. (acquired by Novartis AG), and ZS Pharma, Inc. (acquired by AstraZeneca plc). Prior to Sofinnova, Dr. Freedland was a Principal at Novo A/S. Before his transition to healthcare investing, Dr. Freedland was a Vice President in the healthcare investment banking practice at Morgan Stanley. Prior to transitioning to life sciences finance, Dr. Freedland worked as a research scientist for Roche focusing on preclinical drug discovery and novel target identification for psychiatric and neurodegenerative diseases. Dr. Freedland served on the board of directors of Jiya Acquisition Corp. from November 2020 to November 2022. Dr. Freedland has also served on the board of directors of multiple private companies. Dr. Freedland received his Ph.D. in Pharmacology from Wake Forest University School of Medicine, his M.B.A. from the Kellogg School of Management and his B.A. in Psychology and Religious Studies from Connecticut College.

We believe Dr. Freedland is qualified to serve on our Board because of his extensive leadership, investment and business development experience in the life sciences sector, as well as his experience as a director of several biotechnology company boards.

Rachel McMinn, Ph.D. Dr. McMinn has served as Chief Executive Officer and Executive Chair of our Board since December 2023, and as Founder, Chief Executive Officer and a member of the Board of Directors of Neurogene OpCo since January 2018. Prior to founding Neurogene, she served as Chief Business and Strategy Officer of Intercept Pharmaceuticals, Inc. (formerly Nasdaq: ICPT, until its acquisition by Alfasigma S.p.A.), a biopharmaceutical company dedicated to the treatment of patients with serious liver disease, from April 2014 to December 2017. Prior to her operational experience, Dr. McMinn was an award-winning biotechnology analyst, with 13 years of experience at firms such as Bank of America Merrill Lynch, Cowen and Company and Piper Jaffray. Dr. McMinn has served on the board of directors of Everyone Medicines since 2021, and prior to that the non-profit Everyone Foundation from 2019 to 2021. Dr. McMinn received her B.A., magna cum laude, from Cornell University and her Ph.D. from The Scripps Research Institute, and was awarded a Post-Doctoral Miller Fellowship at the University of California, Berkeley.

We believe Dr. McMinn is qualified to serve on our Board because of her in-depth knowledge of the Company, her operational and senior management experience, and her extensive healthcare investment research in the biotechnology industry.

Class II Directors Continuing in Office

Sarah B. Noonberg, M.D., Ph.D. Dr. Noonberg has served as a member of our Board since August 2019. Dr. Noonberg has over 20 years of industry experience leading development programs from discovery to commercialization across a range of indications, and has served as the Chief Medical Officer of AbCellera Biologics Inc. (Nasdaq: ABCL), a clinical-stage biotechnology company focused on anti-body based medicines in endocrinology, women’s health, immunology and oncology, since September 2025. Prior to AbCellera, from January 2023 to August 2025, Dr. Noonberg served as Chief Medical Officer of Metagenomi, Inc. (Nasdaq: MGX), a next-generation gene editing biotechnology company, and from September 2020 to September 2022, as the Chief Medical Officer of Maze Therapeutics, a human-genetics driven research

and development company. Other executive roles have included Chief Medical Officer of Nohla Therapeutics Inc., Chief Medical Officer of Prothena Corporation plc (Nasdaq: PRTA), Group Vice President and Head of Global Clinical Development at BioMarin Pharmaceuticals Inc. (Nasdaq: BMRN), and Senior Vice President of Early Development at Medivation, Inc. Dr. Noonberg also previously served as a member of the board of directors of Marinus Pharmaceuticals, Inc. (Nasdaq: MRNS), a biopharmaceutical company, from May 2023 to November 2024, and on the board of directors of Protagonist Therapeutics, Inc (Nasdaq: PTGX), a biopharmaceutical company, from December 2017 to May 2023. Dr. Noonberg received her M.D. from the University of California, San Francisco, her Ph.D. in Bioengineering from the University of California, Berkeley, and her B.S. in Engineering from Dartmouth College. She is a board-certified internist and completed her residency at Johns Hopkins Hospital.

We believe Dr. Noonberg is qualified to serve on our Board because of her senior leadership and public company board experience in the biopharmaceutical industry as well as her extensive medical knowledge and clinical development and regulatory experience.

Keith Woods. Mr. Woods has served as a member of our Board since December 2023. Since April 2025, Mr. Woods has been the Chief Operating Officer of Scholar Rock, Inc., a biopharmaceutical company focused on the discovery, development and delivery of innovative medicines for the treatment of serious diseases in which signaling by protein growth factors plays a fundamental role. Prior to his role at Scholar Rock, Mr. Woods was an advisor to the board of directors of argenx SE (Nasdaq: ARGX), a biopharmaceutical company, from March 2023 until April 2025, and served as Chief Operating Officer of argenx SE from April 2018 to March 2023. Mr. Woods has over 30 years of experience in the biopharmaceutical industry, including senior roles at Alexion Pharmaceuticals, Inc., where among other things he led the launch of Soliris in atypical hemolytic uremic syndrome. Prior to Alexion, Mr. Woods held various positions of increasing responsibility within Roche, Amgen Inc. and Eisai Co., Ltd., over a span of 20 years. Mr. Woods has served on the board of directors of TScan Therapeutics, Inc. (Nasdaq: TCRX) since December 2023, and also served on the boards of X4 Pharmaceuticals, Inc. (Nasdaq: XFOR) from October 2023 until April 2025 and Rocket Pharmaceuticals, Inc. (Nasdaq: RCKT) from December 2023 until April 2025. Mr. Woods received his B.S. in Marketing from Florida State University.

We believe Mr. Woods is qualified to serve on our Board because of his extensive senior management, leadership and operational experience in the biopharmaceutical industry.

Board Recommendation

The Board recommends a vote “**FOR**” the election of each of the Class III director nominees set forth above.

PROPOSAL 2: NON-BINDING ADVISORY VOTE ON EXECUTIVE COMPENSATION

In accordance with the rules of the SEC and pursuant to the Dodd-Frank Act, we are providing stockholders with an opportunity to make a non-binding, advisory vote on the compensation of our named executive officers. This non-binding advisory vote is commonly referred to as a “say-on-pay” vote.

The say-on-pay vote is a non-binding, advisory vote on the compensation of our “named executive officers,” as described in this Proxy Statement in the “Executive Compensation” section, the tabular disclosure regarding such compensation and the accompanying narrative disclosure. The say-on-pay vote is not a vote on our general compensation policies or on the compensation of our Board. Stockholders are urged to read the “Executive Compensation” section of the Proxy Statement, which discusses how our executive compensation policies and procedures implement our compensation philosophy. Our Compensation Committee and Board believe that these policies and procedures are effective in implementing our compensation philosophy and in achieving our goals.

As an advisory vote, this proposal is not binding. However, our Board and Compensation Committee, which is responsible for designing and administering our executive compensation program, value the opinions expressed by stockholders in their vote on this proposal and will consider the outcome of the vote when making future compensation decisions for our named executive officers.

We are required to hold a say-on-pay vote at least once every three years, and we have determined that holding a say-on-pay vote every year is appropriate for the Company at this time. Unless the Board modifies its policy on the frequency of holding say-on-pay advisory votes, the next say-on-pay vote is expected to occur in 2027.

Board Recommendation

The Board recommends a vote “**FOR**” this proposal.

PROPOSAL 3: RATIFICATION OF INDEPENDENT AUDITOR APPOINTMENT

Our Audit Committee has appointed Deloitte & Touche LLP (“Deloitte”) as the Company’s independent registered public accounting firm for the year ending December 31, 2026. In this Proposal 4, we are asking stockholders to vote to ratify this appointment. Representatives of Deloitte are expected to be present at the Annual Meeting. They will have the opportunity to make a statement, if they desire to do so, and are expected to be available to respond to appropriate questions from stockholders.

Stockholder ratification of the appointment of Deloitte as the Company’s independent auditor is not required by law or our Bylaws. However, we are seeking stockholder ratification as a matter of good corporate practice. If our stockholders fail to ratify the appointment, the committee will reconsider its appointment. Even if the appointment is ratified, the committee, in its discretion, may direct the appointment of a different independent auditor at any time during the year if it determines that such a change would be in the best interests of the Company and our stockholders.

Deloitte has served as the independent auditor since 2023. The following table summarizes the audit fees billed and expected to be billed by Deloitte for the indicated fiscal years and the fees billed by Deloitte for all other services rendered during the indicated fiscal years. All services associated with such fees and provided after the Merger were pre-approved by our Audit Committee in accordance with the “Pre-Approval Policies and Procedures” described below.

Fee Category	Year Ended December 31,	
	2025	2024
Audit Fees	792,752	717,115
Audit-Related Fees	—	—
Tax Fees	—	—
All Other Fees	—	—
Total Fees	\$ 792,752	\$ 717,115

Pre-Approval Policies and Procedures

Our Audit Committee has adopted procedures requiring the pre-approval of all audit and non-audit services performed by our independent auditor in order to assure that these services do not impair the auditor’s independence. These procedures generally approve the performance of specific services subject to a cost limit for all such services. This general approval is reviewed, and if necessary modified, at least annually. Management must obtain the specific prior approval of the committee for each engagement of our auditor to perform other audit-related or non-audit services. The committee does not delegate its responsibility to pre-approve services performed by our auditor to any member of management. The committee has delegated authority to the committee chair to pre-approve audit and non-audit services to be provided to us by our auditor provided that the fees for such services do not exceed \$100,000. Any pre-approval of services by the committee chair pursuant to this delegated authority must be reported to the committee at its next regularly scheduled meeting.

Report of the Audit Committee

The Audit Committee has reviewed and discussed the audited financial statements for the year ended December 31, 2025 with the Company’s management and with Deloitte, the Company’s independent registered public accounting firm. The Audit Committee has discussed with Deloitte the matters required to be discussed by the applicable standards of the Public Company Accounting Oversight Board (“PCAOB”) and the SEC. The Audit Committee has also received the written disclosures and the letter from Deloitte pursuant to applicable PCAOB requirements regarding its communications with the Audit Committee concerning independence, and the Audit Committee has discussed with Deloitte its independence. Based on the foregoing, the Audit Committee recommended to the Board that the audited financial statements be included in the Company’s Annual Report on Form 10-K for the year ended December 31, 2025 for filing with the SEC.

This report is provided by the following directors, who serve on the Audit Committee:

Cory Freedland, Ph.D. (Chair)
Rohan Palekar
Keith Woods

Board Recommendation

The Board recommends a vote “**FOR**” this proposal.

PROPOSAL 4: NON-BINDING ADVISORY VOTE ON FREQUENCY OF FUTURE ADVISORY VOTES ON EXECUTIVE COMPENSATION

General

As required pursuant to Section 14A of the Exchange Act, this proposal affords stockholders the opportunity to cast a non-binding advisory vote on how often we should include a say-on-pay vote in our proxy materials for future annual stockholder meetings. Under this proposal, stockholders may vote to have the say-on-pay vote conducted every year, every two years, or every three years, or may abstain from voting on this proposal.

Our Board believes that a say-on-pay vote should be conducted every year. Our Board believes that an annual advisory vote on the compensation of our named executive officers allows our stockholders to provide us with a regular opportunity to direct their input on our compensation philosophy and objectives as disclosed in the proxy statement every year. Additionally, an annual advisory vote on the compensation of our named executive officers is consistent with our policy of seeking input from, and engaging in discussions with, our stockholders on corporate governance matters and our executive compensation philosophy and objectives.

The say-on-frequency vote is advisory, and therefore not binding on us, our Board, or our Compensation Committee. Our Board and Compensation Committee value the opinions of our stockholders and will carefully review the voting results, and expect to be guided by the alternative that receives the highest number of votes, even if that alternative does not receive a majority vote. Notwithstanding our Board's recommendation and the outcome of our stockholder vote, our Board may in the future decide to conduct advisory votes on executive compensation on a more or less frequent basis, and may vary its practice based on factors such as discussions with stockholders and the adoption of material changes to the Company's executive compensation program.

We are required to hold a vote on the frequency of future advisory votes on executive compensation at least once every six years, and the next such vote is expected to occur in 2032.

Board Recommendation

The Board recommends a vote for **"ONE YEAR"** on this proposal.

CORPORATE GOVERNANCE

Our business affairs are managed under the direction of our Board. Our Board has adopted a set of Corporate Governance Guidelines as a framework for the governance of the Company, which is posted on our website located at <https://ir.neurogene.com/corporate-governance/governance-overview> under “Governance Documents.”

Our Governance Structure and Philosophy

Our governance practices reflect the environment in which we operate and are designed to support our mission to turn devastating neurological diseases into treatable conditions and improve the lives of patients and families impacted by these rare diseases. We are a clinical stage biotechnology company in an evolving industry, with a focus on developing our candidate pipeline through both business development and internal research efforts, and, like other companies in the biotechnology industry, face extreme stock price and volume fluctuations that are often unrelated or disproportionate to our operating performance. With these business environment considerations in mind, the Board believes our current governance structure enables the management team to act with deliberation and to focus on delivering long-term value to stockholders and protect minority investors from the interests of potentially short-sighted investors who may seek to act opportunistically and not in the best interests of the Company or stockholders generally. This structure includes the following elements:

- **Classified board:** our directors serve three-year terms, with 1/3 of the Board (instead of the entire Board) elected at each annual meeting. This helps to provide stability and continuity, permitting directors to develop and share institutional knowledge and focus on the long term, and encourages stockholders to engage directly with the Board and management team regarding significant corporation transactions.
- **Supermajority voting:** the voting standard for most items is a majority of shares present, but 66 2/3% of the outstanding shares are needed to amend certain provisions of our Certificate of Incorporation and Bylaws and remove directors. This helps protect against a small group of stockholders acting to amend our governing documents or to remove directors for reasons that may not be in the best interests of all stockholders.
- **Plurality voting for directors:** our directors are elected by a plurality of votes cast (instead of a majority of votes cast), meaning the nominees with the most votes are elected. This helps avoid potential disruption to the Board and management team as a result of a “failed election.”
- **Stockholders cannot call special meetings or act by written consent:** stockholders can propose business at each annual meeting (in accordance with our advance notice bylaws and Rule 14a-8), but cannot call a stockholder vote in between annual meetings or act by written consent. This helps avoid unnecessary diversion of Board and management time (potentially at the request of a limited number of stockholders acting to further short-term special interests) from executing on our long-term strategy.

Recognizing that the Company’s operating environment continues to evolve and that governance practices should not be static as a matter of course, the Board evaluates our governance structure to confirm it remains in the best interests of the Company and stockholders and values input from our stockholders on this topic.

Board Composition

Director Nomination Process

The Nominating Committee is responsible for, among other things, engaging in succession planning for directors and identifying qualified individuals to become members of the Board to oversee management’s execution of the Company’s strategy and safeguard the long-term interests of stockholders. In this regard, the committee is charged with developing and recommending Board membership criteria to the Board for approval, evaluating the composition of the Board annually to assess the skills and experience that are currently represented on the Board and to assess the criteria that may be needed in the future, and identifying, reviewing the qualifications of and recommending potential director candidates.

In identifying potential candidates for Board membership, the Nominating Committee considers recommendations from directors, stockholders, management and others, including, from time to time, third-party search firms to assist it in locating qualified candidates. Once potential director candidates are identified, the committee, with the assistance of management, undertakes a vetting process that considers each candidate’s background, independence and fit with the Board’s priorities. As part of this vetting process, the committee, as well as other members of the Board and the Chief Executive Officer (“CEO”), may conduct interviews with the candidates. If the committee determines that a potential candidate meets the needs of the Board and has the desired qualifications, it recommends the candidate to the full Board for appointment or nomination and to the stockholders for election at the annual meeting.

Criteria for Board Membership

In assessing potential candidates for Board membership and in assessing Board composition, the Nominating Committee considers a wide range of factors, including directors' experience, knowledge, understanding of our business environment and specific skills they may possess that are helpful to the Company (including leadership experience, financial expertise and industry knowledge). The committee generally seeks to balance the experiences, skills and characteristics represented on the Board and does not assign specific weight to any of these factors.

In addition, the Nominating Committee generally believes it is important for all Board members to possess the highest personal and professional ethics, integrity and values, an inquisitive and objective perspective, a sense for priorities and balance, the ability and willingness to devote sufficient time and attention to Board matters, and a willingness to represent the long-term interests of all our stockholders.

Stockholder Recommendations for Directors

It is the Nominating Committee's policy to consider written recommendations from stockholders for director candidates. The committee considers candidates recommended by our stockholders in the same manner as a candidate recommended by other sources. Any such recommendations should be submitted to the committee as described under "Stockholder Communications" and should include the same information required under our Bylaws for nominating a director, as described under "Stockholder Proposals and Director Nominations for Next Year's Annual Meeting."

Director Time Commitments

While Board members benefit from service on the boards of other companies and such service is encouraged, under the Board's Principles of Corporate Governance, directors are expected to limit the number of other boards on which they serve so as not to interfere with their service as a director of the Company. In this regard, the Company has adopted specific limits on the number of other public company boards upon which a director may sit. Ordinarily, directors may not serve on the boards of more than four public companies and directors who are executive officers of public companies, including the Company's CEO, may not serve on the board of more than two public companies, including the Company's Board. As part of the annual director independence evaluation process, the Nominating and Governance Committee considers directors' adherence to these expectations, and directors are expected to obtain the approval of the Nominating and Corporate Governance Committee before accepting a seat on the board of another for-profit organization.

Board Leadership Structure

We do not have a policy regarding whether the roles of the Chair of the Board and the CEO should be separate or combined, and our Board believes that there is no single, generally accepted board leadership structure that is appropriate across all circumstances, and that the right structure may vary as circumstances change. As such, the Board periodically reviews its leadership structure to evaluate whether the structure remains appropriate for the Company, and may modify this structure from time to time as and when appropriate to best address the Company's unique circumstances and advance the best interests of all stockholders.

Currently, Rachel McMinn, our CEO, also serves as Executive Chair of the Board and Cory Freedland serves as our Lead Independent Director. Our Board believes that this is the appropriate board leadership structure for us at this time. Combining the roles of CEO and Chair provides unified and efficient leadership as the person responsible for driving strategy and agenda setting at the board level will also be responsible for executing on that strategy as CEO. To help facilitate the Board's independent oversight of management, the independent directors have the opportunity to meet in executive session without management present at every regular Board meeting. Our Lead Independent Director presides over these executive sessions, which is intended to encourage and enhance communication among independent directors. To further help facilitate the Board's independent oversight of management, the Lead Independent Director meets regularly with the Chair, serves as a liaison on Board-related issues between the Chair and the independent directors, oversees the Board's periodic review of the Board's leadership structure and provides leadership on Board matters that require heightened independence, such as matters where the role of the Chair may be, or may be perceived to be, in conflict. The Lead Independent Director is also available for consultation and direct communication with the Company's major stockholders.

The Board believes that its programs for overseeing risk, as described under "Board Risk Oversight," would be effective under a variety of leadership frameworks. Accordingly, the Board's risk oversight function did not significantly impact its selection of the current leadership structure.

Director Independence

Nasdaq listing rules require a majority of a listed company's board of directors to be comprised of independent directors who, in the opinion of the board of directors, do not have a relationship that would interfere with the exercise of independent

judgment in carrying out the responsibilities of a director. Subject to specified exceptions, each member of a listed company’s audit, compensation and nominating committees must be independent, and audit and compensation committee members must satisfy additional independence criteria under the Exchange Act.

Our Board undertook a review of its composition and the independence of each director. Based upon information requested from and provided by each director concerning his or her background, employment and affiliations, including the beneficial ownership of our capital stock by each non-employee director, our Board has determined that Drs. Baffi, Freedland and Noonberg and Messrs. Palekar and Woods qualify as “independent directors” as defined by the Nasdaq listing rules. Dr. McMinn is not an independent director because she is our CEO.

Our Board also determined that each of the directors currently serving on the Audit Committee and the Compensation Committee satisfy the additional independence criteria applicable to directors on such committees under Nasdaq listing rules and the rules and regulations established by the SEC.

Board Committees

Our Board has a separately designated Audit Committee, Compensation Committee and Nominating and Corporate Governance Committee, each of which has the composition and responsibilities described below. Members serve on these committees until their resignation or until otherwise determined by our Board. Each of these committees is empowered to retain outside advisors as it deems appropriate, regularly reports its activities to the full Board and has a written charter, which is posted on our website located at <https://ir.neurogene.com/corporate-governance/governance-overview> under “Governance Documents.”

Name	Audit Committee	Compensation Committee	Nominating and Corporate Governance Committee
Robert Baffi		X	Chair
Cory Freedland	Chair		
Rachel McMinn			
Sarah B. Noonberg		X	
Rohan Palekar	X	Chair	
Keith Woods	X		X
# of Meetings in 2025	4	4	3

Audit Committee. The primary responsibilities of our Audit Committee are to oversee the accounting and financial reporting processes of the Company, including the audits of the Company’s financial statements, the integrity of the financial statements and the annual review of the performance, qualifications and independence of the outside auditor. This includes reviewing the financial information provided to stockholders and others and the adequacy and effectiveness of the Company’s internal controls. The committee also makes recommendations to the Board as to whether financial statements should be included in the Company’s Annual Report on Form 10-K.

Dr. Freedland qualifies as an “audit committee financial expert,” as that term is defined in the rules and regulations established by the SEC, and all members of the Audit Committee are “financially literate” under Nasdaq listing rules.

Compensation Committee. The primary responsibilities of our Compensation Committee are to periodically review and approve the compensation and other benefits for our executive officers and directors. This includes reviewing and approving corporate goals and objectives relevant to the compensation of our CEO, evaluating the performance of our CEO in light of the goals and objectives and setting or recommending to the Board the CEO’s compensation based on the committee’s evaluation. The committee also oversees the evaluation of other executive officers and sets or recommends to the Board the compensation of such executive officers based upon the recommendation of the CEO, administers and makes recommendations to the Board regarding equity incentive plans that are subject to the Board’s approval and approves the grant of equity awards under the plans and oversees our strategies and policies related to human capital management.

The Compensation Committee may delegate its duties and responsibilities to one or more subcommittees. The committee may also delegate authority to certain of our executive officers to review and approve the compensation of our employees and to approve certain equity grants within defined parameters. Even where the committee does not delegate authority, our executive officers will typically make recommendations to the committee regarding compensation to be paid to our employees and the size of equity awards under our equity incentive plans but will not be present during voting or deliberations on their own compensation. The committee has the authority to engage outside advisors, such as compensation

consultants, to assist it in carrying out its responsibilities. The committee engaged Aon’s Human Capital Solutions practice, a division of Aon plc (“Aon”) in 2025 to provide advice regarding the amount and form of executive and director compensation — in this capacity, Aon reports directly to the committee. The committee has determined that (1) Aon satisfies applicable independence criteria and (2) Aon’s work with the Company does not raise any conflicts of interest, in each case under applicable Nasdaq listing rules and the rules and regulations established by the SEC.

Nominating and Corporate Governance Committee. The primary responsibilities of our Nominating and Corporate Governance Committee are to engage in succession planning for the Board, identify individuals qualified to become members of the Board, recommend director candidates to the Board, including for election or reelection to the Board at each annual stockholders’ meeting, and perform a leadership role in shaping the Company’s corporate governance. In addition, the committee is responsible for developing and recommending to the Board criteria for identifying and evaluating qualified director candidates and developing and recommending to the Board a set of corporate governance principles. The committee is also responsible for making recommendations to the Board concerning the size, structure, composition and functioning of the Board and its committees.

Board Risk Oversight

We believe that risk management is an important part of establishing and executing on the Company’s business strategy. Our Board, as a whole and at the committee level, focuses its oversight on the most significant risks facing the Company and on the Company’s processes to identify, prioritize, assess, manage and mitigate those risks. The committees oversee specific risks within their purview, as follows:

- **The Audit Committee** has overall responsibility for overseeing the Company’s practices with respect to risk assessment and management. Additionally, the committee is responsible for overseeing management of risks related to our financial statements and financial reporting process, compliance and information technology and cybersecurity.
- **The Compensation Committee** is responsible for overseeing management of risks related to our compensation policies and programs and human capital management practices.
- **The Nominating Committee** is responsible for overseeing management of risks related to director succession planning and corporate governance practices.

Our Board and its committees receive regular reports from members of the Company’s senior management on areas of material risk to the Company, including strategic, operational, financial, legal and regulatory risks. While our Board has an oversight role, management is principally tasked with direct responsibility for assessing and managing risks, including implementing processes and controls to mitigate their effects on the Company.

Other Corporate Governance Practices and Policies

Director Attendance

In 2025, the Board held six meetings. No member of the Board attended less than 75% of the aggregate number of meetings of the Board and the committees on which he or she served during the period in which he or she was on the Board or committee.

Directors are encouraged to attend the annual meeting of stockholders. All of our directors were in attendance at the 2025 Annual Meeting of the Company’s Stockholders.

Stockholder Communications

Stockholders and other interested parties may communicate with our Board or a particular director by sending a letter addressed to the Board or a particular director to our Corporate Secretary at the address set forth on the first page of this Proxy Statement. These communications will be compiled and reviewed by our Corporate Secretary, who will determine whether the communication is appropriate for presentation to the Board or the particular director. The purpose of this screening is to allow the Board to avoid having to consider irrelevant or inappropriate communications (such as advertisements, solicitations and hostile communications).

To enable the Company to speak with a single voice, as a general matter, senior management serves as the primary spokesperson for the Company and is responsible for communicating with various constituencies, including stockholders, on behalf of the Company. Directors may participate in discussions with stockholders and other constituencies on issues where Board-level involvement is appropriate. In addition, the Board oversees the Company’s stockholder engagement efforts.

Code of Business Conduct and Ethics

Our Board has adopted a Code of Business Conduct and Ethics that establishes the standards of ethical conduct applicable to all our directors, officers and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. It addresses, among other matters, compliance with laws and policies, conflicts of interest, corporate opportunities, regulatory reporting, external communications, confidentiality requirements, insider trading, proper use of assets and how to report compliance concerns. A copy of the code is available on our website located at <https://ir.neurogene.com/corporate-governance/governance-overview> under “Governance Documents.” We intend to disclose any amendments to the code, or any waivers of its requirements, on our website to the extent required by applicable SEC and Nasdaq listing rules. Our Board is responsible for applying and interpreting the code in situations where questions are presented to it.

Insider Trading Policy and Anti-Hedging Policy

We have adopted insider trading policies and procedures governing the purchase, sale and other transactions in Company securities by our directors, officers, employees and other covered persons, as well as by the Company itself, that we believe are reasonably designed to promote compliance with insider trading laws, rules and regulations, as well as Nasdaq listing rules, as applicable.

As a part of these policies and procedures, we prohibit our directors, officers, employees and consultants from engaging in (a) short-term trading; (b) short sales; (c) transactions involving publicly traded options or other derivatives, such as trading in puts or calls with respect to Company securities; and (d) hedging transactions.

Compensation Committee Interlocks

None of the members of our Compensation Committee has at any time during the prior three years been one of our officers or employees. None of our executive officers currently serves, or in the past fiscal year has served, as a member of the board or compensation committee of any entity that has one or more executive officers serving on our Board or Compensation Committee.

EXECUTIVE OFFICERS

Biographical and other information regarding our executive officers, who are appointed by the Board and serve at the Board's discretion, is set forth below. There are no family relationships among any of our directors or executive officers.

Name	Age (as of April 7)	Position
Rachel McMinn, Ph.D. ⁽¹⁾	53	Executive Chair and Chief Executive Officer
Christine Mikail Cvijic, J.D. (“Christine Mikail”)	48	President and Chief Financial Officer
Julie Jordan, M.D.	54	Chief Medical Officer
Stuart Cobb, Ph.D.	56	Chief Scientific Officer

(1) For Dr. McMinn's biographical information, see “Information Regarding Director Nominees and Continuing Directors” above.

Christine Mikail, J.D. Ms. Mikail has served as our President and Chief Financial Officer since December 2023, and as President and Chief Financial Officer of Neurogene OpCo since September 2019 and as a member of the board of directors of Neurogene OpCo since December 2023. In her role, Ms. Mikail leads Corporate Strategy and Business Development, Portfolio Management, Operations, and Finance. Ms. Mikail brings over two decades of experience supporting biotechnology and pharmaceutical companies in corporate strategy and business development, operations, legal and finance capacities. Prior to Neurogene, Ms. Mikail was Chief Administrative Officer and Head of External Business Development/Alliance Management and General Counsel at Axovant Sciences (which became Sio Gene Therapies Inc. (OTCMKTS: SIOX)) from March 2015 to March 2017, where she was an integral member of the team that raised \$362 million in the company's initial public offering. Prior to Axovant, she held a variety of senior executive positions at NPS Pharmaceuticals, Inc., Dendreon Corporation, Eli Lilly and Company, and ImClone Systems. Ms. Mikail developed her life sciences focus as a corporate and securities lawyer at the international law firms of Reed Smith LLP and Wilmer Cutler Pickering Hale and Dorr LLP. Ms. Mikail received her B.A., cum laude, from Rutgers University and her J.D. from Fordham University School of Law in New York.

Julie Jordan, M.D. Dr. Jordan has served as our Chief Medical Officer since January 2024. Prior to Neurogene, Dr. Jordan served as Chief Medical Officer of Homology Medicines, Inc. (formerly Nasdaq: FIXX) from March 2023 to August 2023, where she was responsible for leading clinical development and operations, leading regulatory interactions and supporting translational research programs for the company's pipeline of gene therapy and gene editing candidates for rare diseases, Senior Vice President, Head of Clinical Development and Operations from February 2022 to March 2023 and Vice President, Clinical Development from May 2021 to February 2022. Prior to Homology, Dr. Jordan served as Senior Director, Global Clinical Development at Cerevel Therapeutics, LLC, a pharmaceutical company, from August 2019 to April 2021, where she was responsible for leading clinical development and operations. Prior to Cerevel, she served as Executive Director, Global Clinical Development at Avanir Pharmaceuticals, Inc., a pharmaceutical company, from March 2019 to July 2019, and Senior Director, Global Clinical Development at Avanir from April 2017 to February 2019, where she was also responsible for leading clinical development and operations. Prior to joining industry, Dr. Jordan was a Clinical Instructor of Medicine at Harvard Medical School, treating patients at Massachusetts General Hospital (“MGH”). Dr. Jordan holds an A.B. in Biology from Harvard College and an M.D. from Harvard Medical School and completed her residency in internal medicine at MGH, Harvard Medical School.

Stuart Cobb, Ph.D. Dr. Cobb has served as our Chief Scientific Officer since December 2023, and as Chief Scientific Officer of Neurogene OpCo since January 2019. Dr. Cobb brings more than 20 years of experience in translational neuroscience. His expertise is focused on developing genetic therapies for severe neurological and neurodevelopmental disorders. Dr. Cobb leads Neurogene's scientific research, the development of scientific strategy to support Neurogene's existing and growing gene therapy portfolio, and efforts to identify novel technologies that complement Neurogene's pipeline. In addition to his role at Neurogene, Dr. Cobb has been a director of Stuart Cobb Consulting LTD, a scientific consultancy firm since December 2018 and has led a genetic therapy research laboratory as principal investigator within the Medical School at the University of Edinburgh since November 2017 where he currently serves as the Chair of Translational Neuroscience. Prior to these roles, Dr. Cobb was an independent principal investigator and laboratory head from October 1999 to October 2017 and was previously head of the Centre for Neuroscience at the University of Glasgow. He also previously worked at Inveresk Research International, a contract research organization, from June 1987 to September 1989. Dr. Cobb received his B.Sc. in Pharmacology from the University of Glasgow and Ph.D. (D.Phil.) in Neuroscience from the University of Oxford.

EXECUTIVE COMPENSATION

Our named executive officers (“NEOs”) for the year ended December 31, 2025, which consist of our principal executive officer and the next two most highly-compensated executive officers who served during the year ended December 31, 2025, are:

- Rachel McMinn, Ph.D., our Chief Executive Officer and Executive Chair;
- Christine Mikail, J.D., our President and Chief Financial Officer; and
- Julie Jordan, M.D., our Chief Medical Officer.

2025 Summary Compensation Table

The following table summarizes the compensation awarded to, earned by, or paid to our NEOs during the years ended December 31, 2025 and 2024.

Name and Principal Position	Year	Salary (\$)	Bonus (\$) ⁽¹⁾	Stock awards (\$) ⁽²⁾	Option Awards (\$) ⁽²⁾	All Other Compensation (\$) ⁽³⁾	Total (\$)
Rachel McMinn	2025	618,800	371,280	385,746	1,826,570	7,157	3,209,553
Founder and Chief Executive Officer	2024	595,000	327,250	—	2,535,405	7,160	3,464,815
Christine Mikail	2025	556,000	305,800	327,642	1,552,754	12,262	2,754,458
President and Chief Financial Officer	2024	515,000	231,750	1,150,422	1,465,002	—	3,362,174
Julie Jordan	2025	496,800	198,720	135,576	640,392	819	1,472,307
Chief Medical Officer	2024	460,000	184,636	—	1,809,000	6,400	2,460,036

- (1) Amounts in this column represent annual discretionary bonuses for services performed during the fiscal year that were paid early in the following fiscal year.
- (2) Amounts in these columns represent the aggregate grant date fair value, computed in accordance with Financial Accounting Standards Board (“FASB”) Accounting Standards Codification (“ASC”) Topic 718, of stock awards and stock options granted to the NEOs in the years shown. Dr. McMinn and Ms. Mikail were also granted performance share units (“PSUs”) in 2024, however, the grant date fair value was determined to be \$0 as they were not deemed probable of vesting at the time of grant. The aggregate market value of performance share units granted in 2024 as of the date of grant, assuming the achievement of the highest level of performance conditions, is \$5,485,591 for Dr. McMinn and \$3,606,000 for Ms. Mikail. For more information regarding the assumptions used in these calculations, see Note 12 to our consolidated financial statements, Stock-Based Compensation, in our Annual Report on Form 10-K for the year ended December 31, 2025. These amounts may not correspond to the actual value eventually realized by each NEO because the value realized depends on the market value of our common stock at the time the stock award vests or the stock option is exercised, as applicable.
- (3) Amounts in this column include matching contributions under our 401(k) plan.

Outstanding Equity Awards at 2025 Fiscal-Year End Table

The following table sets forth information regarding the outstanding equity awards held by each NEO as of December 31, 2025.

Name	Grant Date	Option Awards(1)				Stock Awards			Equity incentive plan awards: market or payout value of unearned shares, units or other rights that have not vested (\$)
		Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price (\$)	Option Expiration Date	Number of shares or units of stock that have not vested #(3)	Market value of shares or units of stock that have not vested (\$)	Equity incentive plan awards: number of unearned shares, units or other rights that have not vested #(4)	
Rachel McMinn(2)	9/23/2021	756	—	25.32	9/22/2026	—	—	—	—
	3/9/2023	25,988	11,812	20.22	3/8/2028	—	—	—	—
	3/13/2024	40,811	52,471	36.06	3/12/2034	—	—	—	—
	3/13/2024	—	—	—	—	76,062	1,566,877	—	—
	3/13/2024	—	—	—	—	—	—	76,062	1,566,877
	3/26/2025	—	143,500	16.14	3/25/2035	—	—	—	—
	3/26/2025	—	—	—	—	23,900	492,340	—	—
Christine Mikail	10/1/2019	29,452	—	5.82	9/30/2029	—	—	—	—
	10/16/2020	37,800	—	10.71	10/15/2030	—	—	—	—
	9/23/2021	756	—	23.02	9/22/2031	—	—	—	—
	3/9/2023	25,987	11,813	18.39	3/8/2033	—	—	—	—
	3/13/2024	23,580	30,320	36.06	3/12/2034	—	—	—	—
	3/13/2024	—	—	—	—	21,269	438,141	—	—
	3/13/2024	—	—	—	—	50,000	1,030,000	—	—
	3/13/2024	—	—	—	—	—	—	50,000	1,030,000
	3/26/2025	—	122,000	16.14	3/25/2035	—	—	—	—
	3/26/2025	—	—	—	—	20,300	418,180	—	—
Julie Jordan	1/16/2024	35,937	39,063	32.30	1/16/2034	—	—	—	—
	3/26/2025	—	50,300	16.14	3/25/2035	—	—	—	—
	3/26/2025	—	—	—	—	8,400	173,040	—	—

(1) These stock options vest as to 25% of the award on the one-year anniversary of the vesting commencement date, which is the date of grant, and in 36 equal monthly installments thereafter, subject to continued employment through the applicable vesting date.

(2) Grants made to Dr. McMinn in 2021-2023 have an exercise price that is 110% of the fair market value of the common stock on the date of grant in compliance with the requirements of Section 422 of the Internal Revenue Code of 1986, as amended, relating to grants of incentive stock options to individuals who hold 10% or more of the outstanding stock of the issuer on the date of grant.

(3) Except as noted in the next sentence, these restricted stock units vest ratably over three years on the first, second and third anniversary of the date of grant, subject to continued employment through the applicable vesting date. With respect to the March 13, 2024 grants of 76,062 shares for Dr. McMinn and 50,000 shares for Ms. Mikail, this represents 50% of the performance share units for which the applicable performance goals related to clinical trial enrollment were achieved during

2025, and such shares will vest on the third anniversary of the date of grant of the award, subject to continued employment through such date.

(4) These performance share units will vest upon the achievement of performance goals related to clinical developments prior to December 31, 2026, subject to continued employment through the third anniversary of the date of grant of such award.

Employment Agreements and Offer Letters

Rachel McMinn

On April 1, 2024, we entered into an Executive Employment Agreement (the “McMinn Employment Agreement”) with Dr. McMinn, pursuant to which she is entitled to an annual base salary which, for 2025, was set at the rate of \$618,800, and is subject to increases from time to time as determined by the Board. She is also eligible under the McMinn Employment Agreement to receive an annual performance bonus based on the achievement of any applicable bonus objectives and/or conditions set by the Board or a committee of the Board and subject to her continued employment with the Company through the date of payment of such annual bonus. Dr. McMinn is also eligible to receive annual equity-based incentive awards as determined by the Board or a committee of the Board. The McMinn Employment Agreement also provides for severance payments and benefits in connection with certain terminations of employment as described in the section “Potential Payments Upon Termination or Change of Control.”

Christine Mikail

On April 1, 2024, we entered into an Executive Employment Agreement (the “Mikail Employment Agreement”) with Ms. Mikail, pursuant to which she is entitled to an annual base salary which, for 2025, was set at the rate of \$556,000, and is subject to increases from time to time as determined by the Board. She is also eligible under the Mikail Employment Agreement to receive an annual performance bonus based on the achievement of any applicable bonus objectives and/or conditions set by the Board or a committee of the Board and subject to her continued employment with the Company through the date of payment of such annual bonus. Ms. Mikail is also eligible to receive annual equity based incentive awards as determined by the Board or a committee of the Board. The Mikail Employment Agreement also provides for severance payments and benefits in connection with certain terminations of employment as described in the section “Potential Payments Upon Termination or Change of Control.”

Julie Jordan

Dr. Jordan executed an offer letter with us effective as of January 16, 2024, which set forth conditions of Dr. Jordan’s at-will employment as our Chief Medical Officer. Dr. Jordan also executed our standard form of Proprietary Information and Inventions Agreement. Dr. Jordan’s offer letter entitled her to an initial grant of 75,000 stock options to purchase common stock of the Company pursuant to the 2023 Equity Incentive Plan to vest as to 25% on the first anniversary of the date of grant and ratably thereafter for the next 36 months.

On April 1, 2024, in order to memorialize the terms of her offer letter, we entered into an Executive Employment Agreement (the “Jordan Employment Agreement”) with Dr. Jordan, pursuant to which she is entitled to an annual base salary, which for 2025 was set at the rate of \$496,800, and is subject to increase from time to time as determined by the Board. She is also eligible under the Jordan Employment Agreement to receive an annual performance bonus based on the achievement of any applicable bonus objectives and/or conditions set by the Board or a committee of the Board and subject to her continued employment with the Company through the date of payment of such annual bonus. Dr. Jordan is also eligible to receive annual equity based incentive awards as determined by the Board or a committee of the Board. The Jordan Employment Agreement also provides for severance payments and benefits in connection with certain terminations of employment as described in the section “Potential Payments Upon Termination or Change of Control.”

Incentive Compensation

Annual Cash Bonuses. Our annual incentive program is intended to reward our NEOs for performance during a fiscal year. From time to time, our Compensation Committee or the Board, as applicable, in their discretion may approve annual incentives for our NEOs based on individual performance, company performance, or as otherwise determined appropriate. Each of our NEOs was eligible to receive a target bonus at the discretion of the Board with respect to 2025 (as a percentage of base salary) subject to the Company’s and/or the NEO’s achievement of specific performance goals. The following table sets forth the target annual bonus percentages and the actual bonuses paid for Dr. McMinn, Ms. Mikail and Dr. Jordan for the fiscal year ended December 31, 2025.

Name	Target Annual Cash Bonus (% of Base Salary)	Target Annual Cash Bonus (\$)	Actual Annual Cash Bonus (\$)
Rachel McMinn	60 %	\$ 371,280	\$ 371,280
Christine Mikail	55 %	\$ 305,800	\$ 305,800
Julie Jordan	40 %	\$ 198,720	\$ 198,720

Equity Awards

We provide long-term incentive compensation to our NEOs through grants of stock options to purchase shares of our common stock and awards of restricted stock units. Prior to December 2023, such grants were made under our 2018 Equity Incentive Plan (2018 Plan) and were limited to awards of stock options to purchase shares of common stock. Since January 2024, we have made grants under our 2023 Equity Incentive Plan (2023 Plan). In general, under both plans stock options vest as to 25% of the award on the first anniversary of the applicable vesting commencement date and then the remaining options vest in equal monthly installments on the last day of each month over the following 36 months, subject to our NEO's continued employment through the applicable vesting date. Restricted stock units vest as to 1/3 of the award on each of the first three anniversaries of the grant date of such award. During the years ended December 31, 2024 and December 31, 2025, we made grants of stock options to each of Dr. McMinn, Ms. Mikail and Dr. Jordan. During the year ended December 31, 2024, we made a grant of restricted stock units to Ms. Mikail and during the year ended December 31, 2025, we made grants of restricted stock units to each of Dr. McMinn, Ms. Mikail and Dr. Jordan. In March of 2024, we also granted performance share units (PSUs) to each of Dr. McMinn and Ms. Mikail. These PSUs were eligible to vest as to 50% of such award upon the achievement of certain performance goals related to our clinical trial for NGN-401 for the treatment of Rett syndrome prior to June 30, 2025, which was deemed achieved in June 2025, and the remaining 50% will vest upon the achievement of additional performance goals related to clinical developments prior to December 31, 2026, in each case subject to continued employment through the third anniversary of the date of grant of such award. The grant date fair values of these options, RSUs and PSUs are set forth in the "2025 Summary Compensation Table" above, and the number of shares underlying such awards and the vesting terms of such awards are set forth in the "2025 Summary Compensation Table" and the "Outstanding Equity Awards at 2025 Fiscal-Year End Table" above.

Equity Award Grant Practices

In September 2024, the Compensation Committee adopted equity grant guidelines that, among other things, provide that the Compensation Committee and Board should take into consideration the timing of grants of equity awards to avoid making such grants close in time to the expected release of material nonpublic information and the filing of our annual and quarterly reports with the SEC, and that grants should be made during open trading windows under the Company's insider trading policy. We do not have any program, plan or obligation that requires us to grant equity awards on specified dates. Equity awards may occasionally be granted following a significant change in job responsibilities or to meet special retention or performance objectives.

During 2025, the Compensation Committee did not take material nonpublic information into account when determining the timing and terms of equity-based awards, including stock options, and did not time the disclosure of material nonpublic information for the purpose of affecting the value of executive compensation.

Retirement Benefits

We do not maintain, and no NEO is eligible to participate in, any defined benefit pension plan or nonqualified deferred compensation plan. Each of our current NEOs is eligible to participate in a tax-qualified 401(k) savings plan, which allows eligible participants to defer a portion of their compensation, within the limits prescribed by the Internal Revenue Code of 1986, as amended, and the applicable limits under the 401(k) plan, on a pre-tax or after-tax (Roth) basis, through contributions to the 401(k) plan. Pursuant to the terms of such 401(k) plan, we match 100% of the employees contributions up to the first three percent of employee's eligible compensation and 50% of the employee contributions up to the next two percent of the employee's eligible compensation.

Potential Payments Upon Termination or Change in Control

Rachel McMinn

Pursuant to the terms set forth in an amendment to Dr. McMinn's Restricted Stock Purchase Agreement, in the event that Dr. McMinn is terminated by Neurogene other than for "Cause" or that Dr. McMinn resigns for "Good Reason" within 60

days prior to, or within 12 months following, a “Change in Control,” then the vesting schedule of her stock options will be accelerated so that all unvested stock options will immediately become vested on such date.

For purposes of Dr. McMinn’s vesting acceleration:

- “Cause” generally means Dr. McMinn’s: (i) repeated and willful failure after written notice to perform her reasonably assigned duties for Neurogene, (ii) engagement in dishonesty, gross negligence or misconduct or (iii) conviction of, or the entry of a pleading of guilty or nolo contendere of, any crime involving moral turpitude or any felony.
- “Change in Control” generally means (i) a merger or consolidation in which Neurogene or its subsidiary is a constituent party and Neurogene issues shares of Neurogene capital stock pursuant to such merger or consolidation, or (ii) the sale, lease, transfer, exclusive license or other disposition, in a single transaction or series of related transactions, by Neurogene of all or substantially all the assets of Neurogene.
- “Good Reason” generally means (i) where Dr. McMinn and Neurogene mutually agree in writing that Good Reason exists, (ii) a material diminution in annual base salary (excluding across the board reductions), (iii) any material diminution in title, authority, responsibilities or lines of reporting, or (iv) a required geographic relocation by more than 50 miles, in each case, subject to standard notice and cure periods.

On April 1, 2024, we entered into the McMinn Employment Agreement, pursuant to which Dr. McMinn will be entitled to receive the following severance amounts upon termination by the Company without “cause” or by Dr. McMinn for “good reason” (in each case as defined in the McMinn Employment Agreement), subject to Dr. McMinn’s execution and non-revocation of a release of claims in favor of the Company and continued compliance with certain restrictive covenants:

- a lump sum payment equal to 12 months of her annual base salary then in effect;
- any bonus earned for the fiscal year prior to such termination but not yet paid;
- a pro-rata annual bonus amount calculated based on the number of days from and including the first day of the then-current fiscal year to the date of termination; and
- premium payments for up to 12 months of continuing health care coverage benefits for Dr. McMinn and any dependents who are covered by her health care benefits.

If Dr. McMinn is terminated by the Company without “cause” or resigns for “good reason” during a period that is three months prior to or twelve months following a change in control, then in lieu of the foregoing, Dr. McMinn will be entitled to receive:

- a lump sum payment equal to 1.5x the sum of her annual base salary and target annual bonus then in effect;
- any bonus earned for the fiscal year prior to such termination but not yet paid;
- premium payments for up to 18 months of continuing health care coverage benefits for Dr. McMinn and any dependents who are covered by her health care benefits; and
- acceleration of the vesting of all equity and equity-based awards held by Dr. McMinn as of such termination

For purposes of the McMinn Employment Agreement:

- “Cause” generally means a good faith determination by the Board that her employment be terminated due to her indictment, conviction or plea to a felony or other crime involving fraud, dishonesty or moral turpitude, material misconduct or gross negligence in performing her duties, her material failure or refusal to follow policies and lawful directives of the Board, any fraud, embezzlement, theft or dishonesty in connection with her employment by the Company, her material breach of the McMinn Employment Agreement or her failure to comply in any material respect with applicable laws with respect to the operation of the business.
- “Good Reason” generally means the failure or refusal of the Company to comply with the terms of the McMinn Employment Agreement in any material respect, a material diminution in Dr. McMinn’s duties, title, authority, status or responsibilities, a material reduction in her base salary or annual cash bonus opportunity (in each case unless it is part of a reduction that applies similarly and in substantially the same way to similarly situated officers), or requiring Dr. McMinn to be located at an office that is more than 50 miles from the Company’s current headquarters (other than pursuant to a stay home order from a governmental entity).
- “Change in Control” generally means any person becoming the beneficial owner of more than 50% of the securities of the Company (directly or indirectly), a change in the majority of the Board of Directors, consummation of a merger or other acquisition pursuant to which the beneficial owners of the Company prior to such transaction no longer hold a majority of the voting securities of the Company following such transaction, the implementation of a plan of dissolution or liquidation, or

the consummation of a sale of more than 50% of the Company's assets to an entity whose beneficial ownership is less than 50% owned by the prior beneficial owners of the Company in substantially the same proportions as before such transaction.

Christine Mikail

On April 1, 2024, we entered into the Mikail Employment Agreement pursuant to which Ms. Mikail is entitled to receive the following severance amounts upon termination by the Company without "cause" or by Ms. Mikail for "good reason" subject to Ms. Mikail's execution and non-revocation of a release of claims in favor of the Company and continued compliance with certain restrictive covenants:

- a lump sum payment equal to 12 months of her annual base salary then in effect;
- any bonus earned for the fiscal year prior to such termination but not yet paid;
- a pro rata annual bonus amount calculated based on the number of days from and including the first day of the then-current fiscal year to the date of termination; and
- premium payments for up to 12 months of continuing healthcare coverage benefits for Ms. Mikail and any dependents who are covered by her healthcare benefits.

If Ms. Mikail is terminated by the Company without "cause" or resigns for "good reason" during a period that is three months prior to or twelve months following a change in control (as that term is defined in the 2023 Plan):

- a lump sum payment equal to 1.25x her base salary and target bonus then in effect;
- any bonus earned for the fiscal year prior to such termination but not yet paid;
- up to 18 months of continuing health care coverage benefits for Ms. Mikail and any dependents who are covered by her health care benefits; and
- acceleration of the vesting of all equity and equity-based awards held by Ms. Mikail as of such termination.

For purposes of the Mikail Employment Agreement:

- "Cause" generally means a good faith determination by the Board that her employment be terminated due to her indictment, conviction or plea to a felony or other crime involving fraud, dishonesty or moral turpitude, material misconduct or gross negligence in performing her duties, her material failure or refusal to follow policies and lawful directives of the Board, any fraud, embezzlement, theft or dishonesty in connection with her employment by the Company, her material breach of the Mikail Employment Agreement or her failure to comply in any material respect with applicable laws with respect to the operation of the business.
- "Good Reason" generally means the failure or refusal of the Company to comply with the terms of the Mikail Employment Agreement in any material respect, a material diminution in Ms. Mikail's duties, title, authority, status or responsibilities, a material reduction in her base salary or annual cash bonus opportunity (in each case unless it is part of a reduction that applies similarly and in substantially the same way to similarly situated officers), or requiring Ms. Mikail to be located at an office that is more than 50 miles from the Company's current headquarters (other than pursuant to a stay home order from a governmental entity), in each case, subject to standard notice and cure periods.
- "Change in Control" generally means any person becoming the beneficial owner of more than 50% of the securities of the Company (directly or indirectly), a change in the majority of the Board of Directors, consummation of a merger or other acquisition pursuant to which the beneficial owners of the Company prior to such transaction no longer hold a majority of the voting securities of the Company following such transaction, the implementation of a plan of dissolution or liquidation, or the consummation of a sale of more than 50% of the Company's assets to an entity whose beneficial ownership is less than 50% owned by the prior beneficial owners of the Company in substantially the same proportions as before such transaction.

Julie Jordan

On April 1, 2024, we entered into the Jordan Employment Agreement pursuant to which Dr. Jordan is entitled to receive the following severance amounts upon termination by the Company without "cause" or by Dr. Jordan for "good reason" subject to Dr. Jordan's execution and non-revocation of a release of claims in favor of the Company and continued compliance with certain restrictive covenants:

- a lump sum payment equal to 9 months of her annual base salary then in effect;

- any bonus earned for the fiscal year prior to such termination but not yet paid;
- a pro rata annual bonus amount calculated based on the number of days from and including the first day of the then-current fiscal year to the date of termination; and
- premium payments for up to 9 months of continuing healthcare coverage benefits for Dr. Jordan and any dependents who are covered by her healthcare benefits.

If Dr. Jordan is terminated by the Company without “cause” or resigns for “good reason” during a period that is three months prior to or twelve months following a change in control (as that term is defined in the 2023 Plan):

- a lump sum payment equal to 1x her base salary and target bonus then in effect;
- any bonus earned for the fiscal year prior to such termination but not yet paid;
- up to 12 months of continuing health care coverage benefits for Dr. Jordan and any dependents who are covered by her health care benefits; and
- acceleration of the vesting of all equity and equity-based awards held by Dr. Jordan as of such termination.

For purposes of the Jordan Employment Agreement:

- “Cause” generally means a good faith determination by the Board that her employment be terminated due to her indictment, conviction or plea to a felony or other crime involving fraud, dishonesty or moral turpitude, material misconduct or gross negligence in performing her duties, her material failure or refusal to follow policies and lawful directives of the Board, any fraud, embezzlement, theft or dishonesty in connection with her employment by the Company, her material breach of the Jordan Employment Agreement or her failure to comply in any material respect with applicable laws with respect to the operation of the business.
- “Good Reason” generally means the failure or refusal of the Company to comply with the terms of the Jordan Employment Agreement in any material respect, a material diminution in Dr. Jordan’s duties, title, authority, status or responsibilities, a material reduction in her base salary or annual cash bonus opportunity (in each case unless it is part of a reduction that applies similarly and in substantially the same way to similarly situated officers), or requiring Dr. Jordan to be located at an office that is more than 50 miles from the Company’s current headquarters (other than pursuant to a stay home order from a governmental entity), in each case, subject to standard notice and cure periods.
- “Change in Control” generally means any person becoming the beneficial owner of more than 50% of the securities of the Company (directly or indirectly), a change in the majority of the Board of Directors, consummation of a merger or other acquisition pursuant to which the beneficial owners of the Company prior to such transaction no longer hold a majority of the voting securities of the Company following such transaction, the implementation of a plan of dissolution or liquidation, or the consummation of a sale of more than 50% of the Company’s assets to an entity whose beneficial ownership is less than 50% owned by the prior beneficial owners of the Company in substantially the same proportions as before such transaction.

Pay Versus Performance

As required by Section 953(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act, and Item 402(v) of Regulation S-K, we are providing the following information about the relationship between executive compensation actually paid (as computed in accordance with the SEC rules) and the Company’s performance with respect to certain financial metrics.

Year	Summary Compensation Table Total for Dr. McMinn ¹	Compensation Actually Paid to Dr. McMinn ²	Summary Compensation Table Total for Ms. Cochener ¹	Compensation Actually Paid to Ms. Cochener ²	Summary Compensation Table Total for Dr. Drachman ¹	Compensation Actually Paid to Dr. Drachman ²	Average Summary Compensation Table Total for Non-Principal Executive Officer (“PEO”) NEOs ³	Average Compensation Actually Paid to Non-PEO NEOs ⁴	Value of Initial Fixed \$100 Investment Based On Total Shareholder Return (“TSR”) ⁵	Net Income (Loss) ⁶ (in thousands)
2025	3,209,553	3,228,962	—	—	—	—	2,113,383	2,129,801	202	(90,351)
2024	3,464,815	2,723,448	—	—	—	—	2,911,105	2,361,984	225	(75,144)
2023	1,080,629	1,041,892	1,827,432	1,902,501	549,983	477,211	1,242,197	1,252,222	190	(36,317)

¹ The dollar amounts reported are the amounts of total compensation reported in our Summary Compensation Table.

² The dollar amounts reported represent the amount of “compensation actually paid” to each of the PEOs during the applicable year, as computed in accordance with SEC rules. The dollar amounts do not reflect the actual amount of compensation earned by or paid to the PEOs during the applicable year. In accordance with SEC rules, these amounts reflect “Total Compensation” as set forth in the Summary Compensation Table for each year, adjusted as shown below with respect to the most recent fiscal year. Equity values are calculated in accordance with FASB ASC Topic 718, and the valuation assumptions used to calculate fair values did not materially differ from those disclosed at the time of grant.

Compensation Actually Paid to PEO	2025 (Dr. McMinn)
Summary Compensation Table Total	3,
Less, value of “Stock Awards” and “Option Awards” reported in Summary Compensation Table	(2,
Plus, year-end fair value of outstanding and unvested equity awards granted in the year	2,
Plus (less), year over year change in fair value of outstanding and unvested equity awards granted in prior years	(
Plus (less), change in fair value from prior year end to the vesting date of equity awards granted in prior years that vested in the year	(
Less, prior year-end fair value for any equity awards forfeited in the year	
Compensation Actually Paid to PEO	3,

³ The dollar amounts reported represent the average of the amounts reported for the Company’s NEOs as a group (excluding the PEO(s)) in the “Total” column of the Summary Compensation Table in each applicable year. The names of each of the NEOs (excluding the PEO(s)) included for purposes of calculating the average amounts in each applicable year are as follows: (i) for 2024 and 2025, Ms. Mikail and Dr. Jordan, and (ii) for 2023, Ms. Mikail, Dr. Cobb, and the Company’s former Interim Chief Financial Officer Sean Smith.

⁴ The dollar amounts reported represent the average amount of “compensation actually paid” to the NEOs as a group (excluding the PEO(s)), as computed in accordance with SEC rules. The dollar amounts do not reflect the actual average amount of compensation earned by or paid to the NEOs as a group (excluding the PEO(s)) during the applicable year. In accordance with the SEC rules, these amounts reflect “Total” as set forth in the Summary Compensation Table for each year, adjusted as shown below with respect to the most recent fiscal year. Equity values are calculated in accordance with FASB ASC Topic 718, and the valuation assumptions used to calculate fair values did not materially differ from those disclosed at the time of the grant.

Average Compensation Actually Paid to Non-PEO NEOs	2025
Average Summary Compensation Table Total	2,113,383
Less, average value of “Option Awards” and “Stock Awards” reported in Summary Compensation Table	(1,328,182)
Plus, average year-end fair value of outstanding and unvested equity awards granted in the year	1,762,328
Plus, average fair value as of vesting date of equity awards granted and vested in the year	—
Plus (less), average year over year change in fair value of outstanding and unvested equity awards granted in prior years	(222,475)
Plus (less), average change in fair value from the prior year end to the vesting date of equity awards granted in prior years that vested in the year	(195,253)
Less, prior year-end fair value for any equity awards forfeited in the year	—
Average Compensation Actually Paid to Non-PEO NEOs	2,129,801

⁵ Cumulative TSR is calculated by dividing the sum of the cumulative amount of dividends, if any, for the measurement period, assuming dividend reinvestment, and the difference between the Company’s stock price at the end and the beginning of the measurement period by the Company’s stock price at the beginning of the measurement period. The beginning of the measurement period for each year in the table is December 31, 2022.

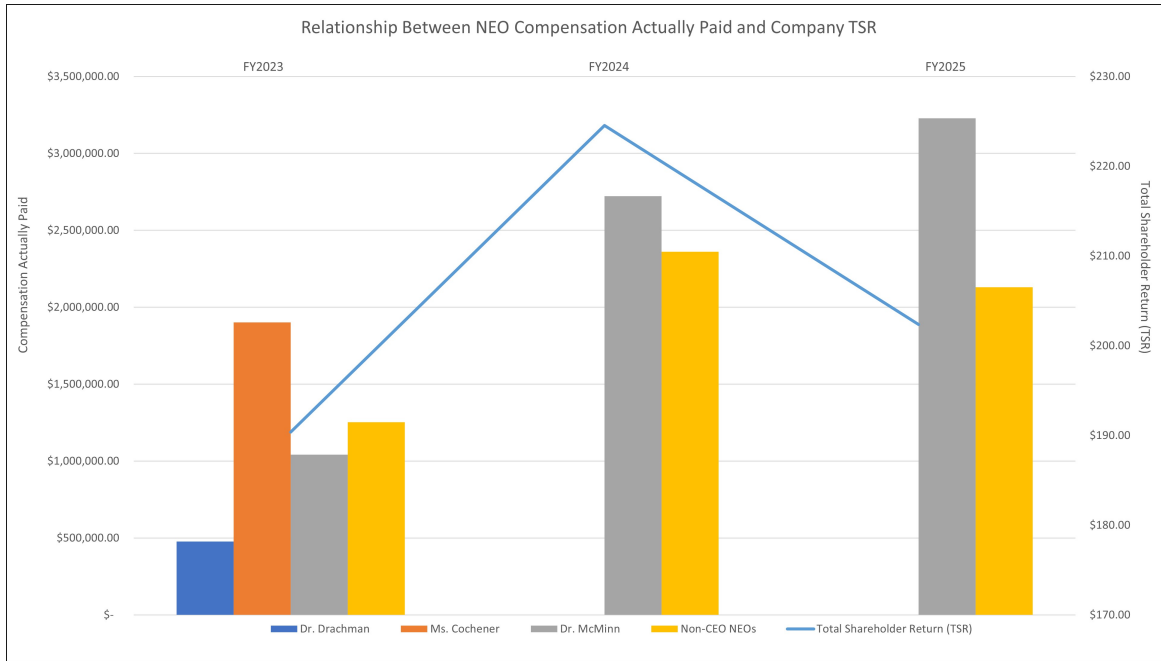
⁶ The dollar amounts reported represent the amount of net income (loss) reflected in the Company’s audited financial statements for the applicable year.

Analysis of the Information Presented in the Pay versus Performance Table

The Company’s executive compensation program reflects a variable pay-for-performance philosophy. While the Company utilizes several performance measures to align executive compensation with Company performance, all of those Company measures are not presented in the Pay versus Performance table. Moreover, the Company generally seeks to incentivize long-term performance, and therefore does not specifically align the Company’s performance measures with compensation that is actually paid (as computed in accordance with SEC rules) for a particular year. In accordance with SEC rules, the Company is providing the following descriptions of the relationships between information presented in the Pay versus Performance table.

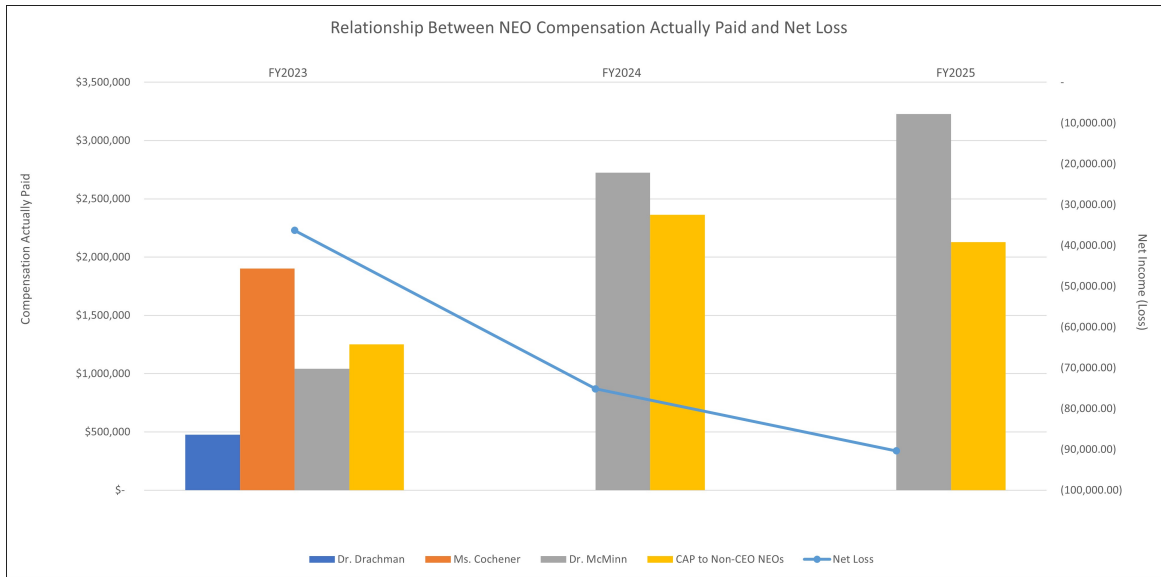
Compensation Actually Paid and Cumulative TSR

The following chart sets forth the relationship between Compensation Actually Paid to our CEO(s), the average of Compensation Actually Paid to our non-CEO NEOs, and the Company's TSR over the fiscal three year period from 2023 through 2025:



Compensation Actually Paid and Net Income (Loss)

The following chart sets forth the relationship between Compensation Actually Paid to our PEO(s), the average of Compensation Actually Paid to our Non-PEO NEOs, and the Company's Net Income (Loss) over the three fiscal year period from 2023 through 2025:



Director Compensation

Non-Employee Director Compensation Policy

We have adopted a policy for compensating our non-employee directors with a combination of cash and equity, with such equity awards being subject to the terms and conditions of our 2023 Plan, and the Stock Option Agreement thereunder and related forms of grant notices approved by the Board. The Board, with input from our independent compensation consultant, periodically reviews non-employee director compensation against a peer group of similarly sized biopharmaceutical companies and seeks to position total director compensation within a competitive range, rather than at the top of the market.

- **Cash Compensation.** For the year ended December 31, 2025, each of our non-employee directors was eligible to receive a \$40,000 annual cash retainer for serving as a member of the Board (except for a non-executive Chair of the Board, if one is appointed, who would have been eligible to receive a \$70,000 annual cash retainer in such a position) as well as the following additional annual cash fees for their committee service:

	Chair	Member
Audit Committee	\$ 15,000	\$ 8,000
Compensation Committee	\$ 12,000	\$ 6,000
Nominating Committee	\$ 10,000	\$ 5,000

Each annual cash retainer and additional annual fee is paid quarterly in arrears. In addition, we reimburse all of our directors for their reasonable out-of-pocket expenses, including travel, food and lodging, incurred by them in connection with attendance at Board and committee meetings.

In March 2026, the Board approved a supplemental annual retainer for the newly appointed Lead Independent Director role of \$25,000, and an increase in certain cash retainer amounts under the non-employee director compensation policy, to reflect the time commitment and responsibilities of these positions. Following that increase, the Audit Committee chair will now receive an annual retainer of \$20,000, each non-chair member of the Audit Committee will receive an annual retainer of \$10,000, the Compensation Committee chair will receive an annual retainer of \$15,000 and each non-chair member of that committee will receive an annual retainer of \$7,500. Annual cash retainer amounts for service as a board member and for the nominating committee chair and members remain unchanged.

- **Equity Compensation.** New non-employee directors are entitled to receive an initial equity grant of 24,100 stock options. Subject to the director's continued service, initial equity awards vest in equal monthly installments over a three-year period following the date of grant. In addition, each non-employee director is entitled to receive an annual equity grant of 12,050 stock options. The annual equity awards vest in equal monthly installments over the 12 months from the date of grant.

Fiscal Year 2025 Non-Employee Director Compensation Table

The following table shows the compensation earned in 2025 by the non-employee directors who served on the Board during such year.

Name	Fees Earned or Paid in Cash (\$)	Option Awards (\$) ⁽¹⁾	All Other Compensation (\$)	Total (\$)
Non-Employee Directors				
Robert Baffi	56,000	184,484	—	240,484
Cory Freedland(2)	55,000	184,484	—	239,484
Sarah Noonberg	46,000	184,484	—	230,484
Rohan Palekar	60,000	184,484	—	244,484
Keith Woods	53,000	184,484	—	237,484

(1) The amounts in this column represent the aggregate grant date fair value of the stock options granted to each non-employee director during the 2025 fiscal year under the 2023 Plan, computed in accordance with FASB ASC Topic 718. For more information regarding the assumptions used in these calculations, see Note 12 to our consolidated financial statements, Stock-Based Compensation, in our Annual Report on Form 10-K for the year ended December 31, 2025.

(2) Dr. Freedland was an employee of Samsara BioCapital, L.P. (“Samsara LP”) for a portion of the year during which he served on our Board as a representative of Samsara LP. While he was employed at Samara LP, all fees paid for Dr. Freedland’s service as a director of the Company were paid to Samsara LP pursuant to the policies of Samsara LP. Pursuant to this policy, Samsara LP received \$18,333 in fees and Dr. Freedland received \$36,667.

Dr. McMinn, our CEO and Executive Chair, did not receive any additional compensation for her service on the Board. The compensation received by Dr. McMinn for her service as our CEO is presented in the 2025 Summary Compensation Table above.

As of December 31, 2025, our non-employee directors held the following options to purchase shares of our common stock:

Name	Number of Shares Subject to Outstanding Options as of December 31, 2025 (#)
Robert Baffi	46,792
Cory Freedland(1)	35,150
Sarah Noonberg	41,250
Rohan Palekar	40,150
Keith Woods	35,150

(1) Until May 2025, Dr. Freedland served on our Board as a representative of Samsara LP, and pursuant to a contractual obligation of Dr. Freedland to Samsara LP, Samsara LP is deemed to beneficially own certain securities received by Dr. Freedland as compensation for serving as a director while employed at Samsara LP. Pursuant to this agreement, Dr. Freedland disclaims any pecuniary interest in the 13,188 stock options deemed to be beneficially owned by Samsara LP and to which Samsara LP is entitled to an indirect pecuniary interest.

CERTAIN INFORMATION ABOUT OUR COMMON STOCK

Security Ownership of Certain Beneficial Owners and Management

The following table sets forth information, to the extent known by us or ascertainable from public filings, with respect to the beneficial ownership of our common stock as of April 7, 2026 by:

- each person, or group of affiliated persons, who is known by us as of such date to be the beneficial owners of more than 5.0% of our common stock.
- each of our directors and nominees;
- each of our NEOs; and
- all of our directors and executive officers as a group.

Beneficial ownership is determined in accordance with the rules of the SEC, and thus represents voting or investment power with respect to our securities. Under such rules, beneficial ownership includes any shares over which the individual has sole or shared voting power or investment power as well as any shares that the individual has the right to acquire within 60 days after the date of this table. To our knowledge and subject to applicable community property rules, the persons and entities named in the table have sole voting and sole investment power with respect to all equity interests beneficially owned, unless otherwise indicated.

The percentage ownership information shown in the column titled “Percentage of Shares Beneficially Owned” in the table below is based on 15,615,786 shares of our common stock outstanding as of the date of this table (plus any shares that such person has the right to acquire within 60 days after the date of this table). Unless otherwise indicated, the address of each individual listed in this table is the Company’s address set forth on the first page of this Proxy Statement.

Name of Beneficial Owner	Beneficial Ownership	
	Number of Shares Beneficially Owned	Percentage of Shares Beneficially Owned
Greater than 5% stockholders:		
Samsara BioCapital, L.P. ⁽¹⁾	1,730,315	11.07 %
Entities affiliated with Baker Brothers Investments ⁽²⁾	1,624,874	9.99 %
Entities affiliated with EcoR1 Capital Fund, L.P. ⁽³⁾	1,593,827	9.99 %
Entities affiliated with Redmile Group, LLC ⁽⁴⁾	1,572,909	9.99 %
Entities affiliated with RTW Investments, LP ⁽⁵⁾	1,585,058	9.99 %
Entities affiliated with Casdin Capital, LLC ⁽⁶⁾	1,295,361	8.29 %
Entities affiliated with BlackRock Capital Management, Inc. ⁽⁷⁾	1,011,436	5.99 %
Entities affiliated with Trails Edge Capital Partners, LP ⁽⁸⁾	785,000	5.02 %
Named Executive Officers and Directors:		
Rachel McMinn ⁽⁹⁾	1,425,537	9.06 %
Christine Mikail ⁽¹⁰⁾	219,781	1.39 %
Julie Jordan ⁽¹¹⁾	60,392	*
Robert Baffi ⁽¹²⁾	45,379	*
Cory Freedland ⁽¹³⁾	33,737	*
Rohan Palekar ⁽¹²⁾	38,737	*
Sarah B. Noonberg ⁽¹²⁾	39,837	*
Keith Woods ⁽¹²⁾	33,737	*
All current executive officers and directors as a group (9 persons) ⁽¹⁴⁾	2,064,155	11.68%

⁽¹⁾Based on information provided in a Schedule 13G filed with the SEC on November 27, 2024 and, with respect to certain securities, the Company's records. Consist of (i) 1,717,127 shares of Common Stock reported in the Schedule 13G as held by Samsara LP, and (ii) 13,188 shares of Common Stock issuable upon exercise of stock options held by Cory Freedland that were granted to Dr. Freedland as compensation for his service as a Director of the Company during the period when Dr. Freedland was a partner at Samsara for which Dr. Freedland disclaims all pecuniary interest in favor of Samsara pursuant to a contractual obligation of Dr. Freedland to Samsara. Excludes shares of Common Stock issuable upon the exercise of Pre-Funded Warrants held by Samsara LP. Pursuant to the terms of the Pre-Funded Warrants, the Pre-Funded Warrants will be exercisable only to the extent that after giving effect to such exercise the holder thereof and their affiliates would beneficially own no more than 9.80% of outstanding Common Stock of the Company. However, Samsara LP may from time to time provide written notice to the Company, to increase such beneficial ownership limitation to any other percentage not in excess of 19.99%. Any such change will not be effective until the 61st day after such notice is delivered to the Company. As a result of this restriction, the number of shares of Common Stock that may be issued upon exercise of the Pre-Funded Warrants by Samsara LP may change depending upon changes in the outstanding shares of Common Stock. Without giving effect to the above beneficial ownership limitation, the Pre-Funded Warrants that Samsara LP holds would be exercisable for an aggregate of 87,070 shares of Common Stock. Samsara BioCapital GP, LLC ("Samsara GP") is the sole general partner of Samsara LP and may be deemed to have voting and investment power over the securities held by Samsara LP. Dr. Srinivas Akkaraju is a managing member of Samsara GP and may be deemed to have voting and dispositive power over the securities held by Samsara LP. The address of the above persons is 628 Middlefield Road, Palo Alto, CA 94301.

⁽²⁾Based on information provided in a Schedule 13G/A filed with the SEC on August 14, 2025, which reported that Baker Bros. Advisor LP (the "Adviser") and its general partner, Baker Bros. Advisors (GP) LLC (the "Adviser GP") may be deemed to indirectly beneficially own (a) 903,952 shares of common stock held by Life Sciences, L.P. ("Life Sciences"), (b) 85,239 shares of common stock directly held by 667, L.P. ("667", and together with Life Sciences, the "Funds") (c) 113 shares held directly by Julian C. Baker previously received as an in-kind distribution, (d) 113 shares held directly by Felix J. Baker previously received as an in-kind distribution, and (e) 2,500 shares of common stock directly held by M. Cantey Boyd, a full-time employee of the Adviser, which Ms. Boyd received from the exercise of options to purchase common stock received as director's compensation for her previous service on the Board of Directors. Ms. Boyd disclaims all pecuniary interest in the common stock held by her pursuant to the policy of the Funds and the adviser, which does not permit employees of the adviser to receive compensation for serving as directors of the Company and provides that the Funds are instead entitled to such pecuniary interest. The Funds also hold certain prefunded warrants exercisable at any time for common stock, however, these warrants are only exercisable to the extent that upon giving effect or immediately prior to such exercise the holders thereof, together with their affiliates and any members of a Section 13(d) group with such holders and/or their affiliates would beneficially own, for purposes of Rule 13d-3 under the Exchange Act, no more than 4.99% of the outstanding shares of common stock; provided, however, that such percentage may be increased or decreased from time to time to any other percentage not in excess of 19.99%, effective 61 days following notice to the Company. As a result of this restriction, the number of shares that may be issued upon exercise of such warrants may change depending upon changes in the amount of outstanding shares of Common Stock; however, no such warrants are exercisable within 60 days of April 7, 2026. In addition to the above, Julian C. Baker and Felix J. Baker, affiliates of the Adviser, each also directly holds 113 shares of Common Stock of the Issuer previously received from in-kind distributions. Pursuant to the management agreements, as amended, among the Adviser, the Funds and their respective general partners, the Funds' respective general partners relinquished to the Adviser all discretion and authority with respect to the investment and voting power of the securities held by the Funds, and thus the Adviser has complete and unlimited discretion and authority with respect to the Funds' investments and voting power over investments. The Adviser GP is the sole general partner of the Adviser. The Adviser GP, Felix J. Baker and Julian C. Baker as managing members of the Adviser GP, and the Adviser may be deemed to be beneficial owners of these securities directly held by the Funds.

⁽³⁾Based on information provided on a Form 13G filed with the SEC on November 14, 2025. Consists of (i) 1,271,342 shares of Common Stock owned by EcoR1 Qualified Capital Fund L.P. ("Qualified Fund") and other private investment funds managed by EcoR1 Capital, LLC ("EcoR1") and (ii) 322,485 shares of Common Stock issuable in the aggregate upon the exercise of Pre-Funded Warrants held by Qualified Fund and other private investment funds managed by EcoR1. Pursuant to the terms of the Pre-Funded Warrants, the Pre-Funded Warrants will be exercisable only to the extent that after giving effect to such exercise the holder thereof and their affiliates would beneficially own no more than 9.99% of outstanding Common Stock of the Company. However, Qualified Fund or EcoR1 may from time to time provide written notice to the Company to increase such beneficial ownership limitation to any other percentage not in excess of 19.99%. Any such change will not be effective until the 61st day after such notice is delivered to the Company. As a result of this restriction, the number of shares of Common Stock that may be issued upon exercise of the Pre-Funded Warrants held by Qualified Fund or other private investment funds managed by EcoR1 may change depending upon changes in the outstanding shares of Common Stock. Without giving effect to the above beneficial ownership limitation, the Pre-Funded Warrants held by Qualified Fund and other private investment funds managed by EcoR1 would be exercisable for an aggregate of 1,089,658 shares of Common Stock. EcoR1 is the general partner of Qualified Fund. Oleg Nodelman is the control person of EcoR1 and may be deemed to share dispositive and voting power over the shares held by Qualified Fund and other private investment funds managed by EcoR1. Mr. Nodelman, and EcoR1 each disclaim beneficial ownership of all shares except to the extent of their pecuniary interest therein. The address of the above persons is 357 Tehama Street #3, San Francisco, CA 94103.

⁽⁴⁾Based on information provided in a Schedule 13G/A filed with the SEC on February 17, 2026. Consists of (i) 1,459,599 shares of the Company's common stock held by certain private investment vehicles (the "Redmile Vehicles") managed by Redmile Group, LLC ("Redmile"), including 652,030 shares held by Redmile Biopharma Investments I, L.P. ("Redmile Biopharma I"), and (ii) 113,310 shares of the Company's common stock issuable upon the exercise of pre-funded warrants held by Redmile Vehicles. Pursuant to the terms of the Pre-Funded Warrants, the Pre-Funded Warrants will be exercisable only to the extent that after giving effect to such exercise the holder thereof and their affiliates would beneficially own no more than 9.99% of outstanding Common Stock of the Company. However, Redmile may from time to time provide written notice to the Company to increase such beneficial ownership limitation to any other percentage not in excess of 19.99%. Any such change will not be effective until the 61st day after such notice is delivered to the Company. As a result of this restriction, the number of shares of Common Stock that may be issued upon exercise of the Pre-Funded Warrants by Redmile or the Redmile Vehicles may change depending upon changes in the outstanding shares of Common Stock. Without giving effect to the above beneficial ownership limitation, the Pre-Funded Warrants that the Redmile Vehicles hold would be exercisable for an aggregate of 160,003 shares of Common Stock. Redmile is the investment manager/adviser to the Redmile Funds, and, in such capacity, exercises voting and investment power over all of the shares held by the Redmile Funds and may be deemed to be the beneficial owner of these shares. Jeremy C. Green serves as the managing member of Redmile and also may be deemed to be the beneficial owner of these shares. Redmile and Mr. Green each disclaim beneficial ownership of these shares, except to the extent of its or his pecuniary interest in such shares, if any. The address of the Redmile Funds is c/o Redmile Group, LLC, One Letterman Drive, Building D, Suite D3-300, San Francisco, CA 94129.

⁽⁵⁾Based on information provided in a Schedule 13G/A filed with the SEC on February 14, 2025 and with respect to certain securities, the Company's records. Consists of (i) 1,362,456 shares of Common Stock and (ii) 221,247 shares of Common Stock issuable upon the exercise of Pre-Funded Warrants. Securities are held by RTW Investments, L.P., a Delaware limited partnership and the investment adviser to certain funds (the "RTW Funds"), and Roderick Wong, M.D., the Managing Partner and Chief Investment Officer of RTW Investments, with respect to the Shares directly held by the RTW Funds. The address of the above persons is 40 10th Avenue, Floor 7, New York, New York 10014.

⁽⁶⁾Based on information provided in a Schedule 13G/A filed with the SEC on February 14, 2025, which reported that Casdin Capital LLC ("Cascin Capital") held sole voting power over 0 shares of Common Stock, shared voting power over 1,295,361 shares of Common Stock, including shared voting power over 1,075,000 shares of Common Stock with Casdin Partners Master Fund, L.P. ("CPM Fund") and Casdin Partners GP, LLC ("CP GP"), sole dispositive power over 0 shares of Common Stock, and shared dispositive power over 1,295,361 shares of Common Stock, including shared dispositive power over 1,075,000 shares of Common Stock with CPM Fund and CP GP. All of the securities are directly owned by advisory clients of Casdin Capital, and none of those advisory clients, other than CPM Fund may be deemed to beneficially own more than 5% of the Common Stock. CP GP is the general partner of CPM Fund. Eli Casdin is the Managing Member of Casdin Capital and CP GP. Mr. Casdin, Casdin Capital, and CP GP disclaim beneficial ownership of any of the reported shares of Common Stock herein, except to the extent of their pecuniary interest therein. The address of the foregoing persons is 1350 Avenue of the Americas, Suite 2600, New York, NY 10019.

⁽⁷⁾Based on information provided in a Schedule 13G/A filed with the SEC on April 23, 2025, which reported that BlackRock, Inc. ("BlackRock") held sole voting power over 999,743 shares of Common Stock, shared voting power over 0 shares of Common Stock, sole dispositive power over 1,011,436 shares and shared dispositive power over 0 shares of Common Stock. The address for BlackRock is 50 Hudson Yards, New York, NY 10001.

⁽⁸⁾Based on information provided in a Schedule 13G filed with the SEC on December 15, 2025, which reported that Trails Edge Capital Partners, LP ("Trails Edge") as the investment manager to Trails Edge Biotechnology Master Fund LP, held sole voting power and sole dispositive power over 785,000 shares of Common Stock. Ortav Yehudai is the Chief Investment Officer of Trails Edge Capital and exercises voting and investment discretion with respect to these securities. The address for Trails Edge Capital is 3455 Peachtree Road NE, 5th Floor, Atlanta, GA 30326.

⁽⁹⁾Includes options to purchase 123,063 shares of the Company's common stock that are exercisable within 60 days of the date of this table

⁽¹⁰⁾Includes options to purchase 162,709 shares of the Company's common stock that are exercisable within 60 days of the date of this table; 19,200 shares are held jointly by Ms. Mikail and her spouse.

⁽¹¹⁾Includes options to purchase 58,420 shares of the Company's common stock that are exercisable within 60 days of the date of this table.

⁽¹²⁾Consists of options to purchase shares of the Company's common stock that are exercisable within 60 days of the date of this table.

⁽¹³⁾Dr. Freedland was previously an employee of Samsara BioCapital, L.P. ("Samsara LP") until May 2025. Pursuant to a contractual obligation of Dr. Freedland in favor of Samsara LP, certain stock options exercisable for 13,188 shares of common stock received by Dr. Freedland for his service as a director during his tenure at Samsara LP are held by Dr. Freedland for the benefit of Samsara and Dr. Freedland does not have any right to the pecuniary interest in such securities. The indirect interest in these securities held by Samsara LP is disclosed in the holdings of Samsara LP shown in the table above.

⁽¹⁴⁾ Includes options to purchase 636,289 shares of the Company's common stock that are exercisable within 60 days of the date of this table.

Securities Authorized for Issuance Under Equity Compensation Plans

The following table contains information about our equity compensation plans as of December 31, 2025. As of such date, we had outstanding awards under five equity compensation plans: the Neoleukin 2014 Equity Incentive Plan (“2014 Plan”), the Neurogene 2018 Equity Incentive Plan (“2018 Plan”), our 2023 Plan, our 2023 ESPP and our 2025 Inducement Plan.

Plan Category	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights (a)	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights ⁽¹⁾ (b)	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a)) (c)
Equity compensation plans approved by security holders ⁽²⁾	2,491,090	23.65	1,590,914
Equity compensation plans not approved by security holders ⁽³⁾	105,945	20.52	394,055
Total	2,597,035	23.52	1,984,969

- (1) The weighted-average exercise price does not take into account shares issuable upon vesting of outstanding restricted stock unit awards, if any, which have no exercise price.
- (2) Includes the 2014 Plan, 2018 Plan, 2023 Plan and 2023 ESPP. Excludes 891,294 shares that were added to our 2023 Plan on January 1, 2026 pursuant to the evergreen provision thereunder that provides for automatic annual increases on January 1 of each year until January 1, 2033 equal to 4% of our outstanding shares (including any prefunded warrants and outstanding preferred stock on an as-converted-to-common basis) as of that date (or such lesser amounts as approved by the Board) and 222,823 shares that were added to our 2023 ESPP on January 1, 2026 pursuant to the evergreen provision thereunder that provides for automatic annual increases on January 1 of each year until January 1, 2033 equal to 1% of our outstanding shares (including any prefunded warrants and outstanding preferred stock on an as-converted-to-common basis) as of that date (or such lesser amounts as approved by the Board). While there are outstanding awards under the 2014 Plan and 2018 Plan, no further shares are available for new awards under those plans. We initiated the first purchase period under our ESPP on April 15, 2025, and the number of securities remaining available for future issuance includes 313,088 shares that were available under the ESPP, including 2,773 shares subject to purchase during the purchase periods in effect as of December 31, 2025.
- (3) Represents the 2025 Inducement Plan.

Material Features of the Amended and Restated 2023 Inducement Plan

The 2025 Inducement Plan was established by the Board in March 2025 with the purpose of helping the Company to attract and retain the best available employees and officers for positions of substantial responsibility and to motivate participants to optimize the profitability and growth of the Company through incentives that are consistent with the Company’s goals and that link the personal interests of participants to those of the Company’s stockholders. In accordance with Nasdaq rules, this plan is used to offer equity awards as material inducements for new employees to join the Company. Subject to adjustment for certain changes in our capitalization, the maximum aggregate number of shares that may be issued under the 2025 Inducement Plan is 500,000. The equity grants awarded under the 2025 Inducement Plan are typically in the form of stock options with exercise prices equal to the fair market value of our common stock on the date of grant, but this plan also provides for the granting of other types of equity awards, including stock appreciation rights, restricted stock awards and restricted stock units

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

The following is a summary of each transaction or series of similar transactions since January 1, 2024, or any currently proposed transaction, to which we were or are a party in which:

- the amount involved exceeds \$120,000; and
- any related person (including our directors, executive officers, beneficial owners of more than 5% of our voting capital stock and any members of their immediate family) had or will have a direct or indirect material interest, other than compensation (including the consulting agreement relating to Dr. Cobb’s provision of services to the Company as Chief Scientific Officer) and other arrangements that are described under the section titled “Executive Compensation” or that were approved by our Compensation Committee.

Beneficial ownership of securities is determined in accordance with the rules of the SEC.

Related Party Transactions

2024 Private Placement

On November 5, 2024, the Company completed the 2024 Private Placement. Pursuant to the Securities Purchase Agreement, the Company issued and sold, and the investors purchased, (i) 1,835,000 shares of Common Stock and (ii) 2,165,042 2024 Pre-Funded Warrants, exercisable for 2,165,042 shares of Common Stock, at a purchase price of \$50.00 per share or \$49.999 per 2024 Pre-Funded Warrant, which represents the per share purchase price of the Common Stock less the \$0.001 per share exercise price for each 2024 Pre-Funded Warrant, for an aggregate purchase price of approximately \$200.0 million. Six of the investors or their affiliates were or became upon completion of the transaction beneficial holders of more than 5% of Common Stock, and the table below sets forth the number of shares of Common Stock or 2024 Pre-Funded Warrants purchased by such holders at the closing of the 2024 Private Placement.

Participant	Shares of Common Stock	2024 Pre-Funded Warrants	Total Purchase Price
Entities affiliated with RTW Investments, LP	215,000	385,007	\$ 30,000,000
Entities affiliated with Casdin Capital, LLC	500,000	—	\$ 25,000,000
Entities affiliated with Redmile Group, LLC	340,000	160,003	\$ 25,000,000
Entities affiliated with EcoR1	—	500,010	\$ 25,000,000
Entities affiliated with Great Point Partners	360,000	—	\$ 18,000,000
Entities affiliated with Samsara BioCapital, LP	180,000	20,000	\$ 10,000,000

2024 Registration Rights Agreement

On November 5, 2024, the Company entered into the 2024 Registration Rights Agreement with the Selling Stockholders named therein, including the investors listed above, pursuant to which, among other things, the Company agreed to provide for the registration and resale of certain shares of Common Stock that are held by such Selling Stockholders from time to time, including the shares of Common Stock issuable upon exercise of the 2024 Pre-Funded Warrants.

Agreements with Baker Bros Advisors LP and affiliates

Prior to the Merger, entities affiliated with Baker Bros. Advisors LP (“BBA”) beneficially owned more than 5% of our outstanding Common Stock. BBA is a party to the 2016 Registration Rights agreement described in our Registration Statement on Form S-3 filed on March 24, 2025. The Company also entered into a Letter Agreement with BBA on July 17, 2023, pursuant to which BBA has the right to nominate one person for election as a director of the Company at any time that BBA owns at least 12.5% of the then-outstanding stock of the Company and which also obligates the Company to enter into a Registration Rights Agreement with any BBA entity who may be deemed an “affiliate” of the Company. This letter agreement was amended in April 2025 to increase the threshold for BBA’s right to nominate a director to 14.9% of the then-outstanding stock of the Company.

Indemnification Agreements and Insurance

Our Bylaws require us to indemnify our directors and officers to the fullest extent permitted by Delaware law. We have also entered into agreements to indemnify our directors and executive officers. These agreements, among other things, require us to indemnify these individuals for certain expenses (including attorneys' fees), judgments, fines and settlement amounts reasonably incurred by such person in any action or proceeding, including any action by or in our right, on account of any services undertaken by such person on behalf of the Company or that person's status as a director or officer, as applicable, to the maximum extent allowed under Delaware law. We have also purchased directors' and officers' liability insurance.

Related Party Transaction Policy

Our Board has a written policy regarding the review and approval or ratification by our Audit Committee of related person transactions. For purposes of our policy only, a related person transaction is a transaction, arrangement or relationship or any series of similar transactions, arrangements or relationships between us or any of our subsidiaries and any related person in which the aggregate amount involved since the beginning of our last completed fiscal year exceeds or is expected to exceed \$120,000 and such related person has or will have a direct or indirect interest. A related person is defined to include any executive officers, directors or director nominees or beneficial owner of more than 5% of our common stock and any immediate family member of any of the foregoing persons. In determining to approve or ratify any such transaction, our Audit Committee is expected to take into account, among other factors it deems appropriate, whether the transaction is on terms no less favorable than terms generally available to an unaffiliated third-party under the same or similar circumstances and the extent of the related person's interest in the transaction. Transactions involving compensation for services provided to us as an employee or director, among other limited exceptions, are deemed under the terms of the policy to have standing pre-approval by the Audit Committee but may be specifically reviewed if appropriate in light of the facts and circumstances. Any director who is a related person with respect to a transaction under review is not permitted to participate in the deliberations (other than to provide information concerning the transaction to the Audit Committee) or vote on approval of the transaction.

OTHER MATTERS

Delivery of Documents to Stockholders Sharing an Address

A number of brokerage firms have adopted a procedure approved by the SEC called “householding.” Under this procedure, certain stockholders who have the same address and do not participate in electronic delivery of proxy materials will receive only one copy of the proxy materials, including this Proxy Statement, the Notice and our Annual Report on Form 10-K for the year ended December 31, 2025, until such time as one or more of these stockholders notifies us that they wish to receive individual copies. This procedure helps to reduce duplicate mailings and save printing costs and postage fees, as well as natural resources. If you received a “householding” mailing this year and would like to have additional copies of the proxy materials mailed to you, please send a written request to our Corporate Secretary at the address set forth on the first page of this Proxy Statement, or call (877) 237-5020, and we will promptly deliver the proxy materials to you. Please contact your broker if you received multiple copies of the proxy materials and would prefer to receive a single copy in the future, or if you would like to opt out of “householding” for future mailings.

Availability of Additional Information

We will provide, free of charge, a copy of our Annual Report on Form 10-K for the year ended December 31, 2025, including exhibits, upon the written or oral request of any stockholder of the Company. Please send a written request to our Corporate Secretary at the address set forth on the first page of this Proxy Statement, or call the number above.

NEUROGENE INC.
 C/O: PROXY SERVICES
 P. O. BOX 9142
 FARMINGDALE, NY 11735



SCAN TO
 VIEW MATERIALS & VOTE



VOTE BY INTERNET - www.proxyvota.com or scan the QR Barcode above
 Use the Internet to transmit your voting instructions and for electronic delivery of information up until 11:59 p.m. Eastern Time on June 2, 2026. Have your proxy card in hand when you access the web site and follow the instructions to obtain your records and to create an electronic voting instruction form.

During The Meeting - Go to www.virtualshareholdermeeting.com/NGNE2026

You may attend the meeting via the Internet and vote during the meeting. Have the information that is printed in the box marked by the arrow available and follow the instructions.

VOTE BY PHONE - 1-800-690-6903

Use any touch-tone telephone to transmit your voting instructions up until 11:59 p.m. Eastern Time on June 2, 2026. Have your proxy card in hand when you call and then follow the instructions.

VOTE BY MAIL

Mark, sign and date your proxy card and return it in the postage-paid envelope we have provided or return it to Vote Processing, c/o Broadridge, 51 Mercedes Way, Edgewood, NY 11717.

TO VOTE, MARK BLOCKS BELOW IN BLUE OR BLACK INK AS FOLLOWS:

KEEP THIS PORTION FOR YOUR RECORDS
 DETACH AND RETURN THIS PORTION ONLY

THIS PROXY CARD IS VALID ONLY WHEN SIGNED AND DATED.

<p>The Board of Directors recommends you vote FOR the following director nominees:</p> <p>1. Election of Class III Directors for terms expiring in 2029.</p> <p>Nominees</p> <p>01) Robert Baffi, Ph.D. 02) Rohan Palekar</p> <p>The Board of Directors recommends you vote FOR proposals 2 and 3.</p> <p>2. To approve on an advisory (non-binding) basis the compensation of the Company's named executive officers.</p> <p>3. To ratify on an advisory (non-binding) basis the appointment of Deloitte & Touche LLP as the Company's independent registered public accounting firm for the year ending December 31, 2026.</p> <p>The Board of Directors recommends you vote 1 YEAR on the following proposal.</p> <p>4. To hold a non-binding advisory vote on whether future non-binding advisory votes on the compensation paid by the company to its named executive officers should be held every one, two or three years.</p> <p>NOTE: In their discretion, the proxies are authorized to vote upon such other business as may properly come before the meeting or any adjournment or postponement thereof.</p> <p>Please sign exactly as your name(s) appear(s) hereon. When signing as attorney, executor, administrator, or other fiduciary, please give full title as such. Joint owners should each sign personally. All holders must sign. If a corporation or partnership, please sign in full corporate or partnership name by authorized officer.</p>	<table border="0"> <tr> <td style="text-align: center;">For All</td> <td style="text-align: center;">Withhold All</td> <td style="text-align: center;">For All Except</td> <td rowspan="2" style="vertical-align: top;"> To withhold authority to vote for any individual nominee(s), mark "For All Except" and write the number(s) of the nominee(s) on the line below. </td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </table> <table border="0"> <tr> <td style="text-align: center;">For</td> <td style="text-align: center;">Against</td> <td style="text-align: center;">Abstain</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </table> <table border="0"> <tr> <td style="text-align: center;">1 year</td> <td style="text-align: center;">2 years</td> <td style="text-align: center;">3 years</td> <td style="text-align: center;">Abstain</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </table>	For All	Withhold All	For All Except	To withhold authority to vote for any individual nominee(s), mark "For All Except" and write the number(s) of the nominee(s) on the line below.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	For	Against	Abstain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1 year	2 years	3 years	Abstain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																			

Signature [PLEASE SIGN WITHIN BOX]				
Date				

Signature (Joint Owners)				
Date				

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Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting:
The Notice and Proxy Statement and Annual Report/10K wrap are available at www.proxyvote.com

NEUROGENE INC.
Proxy for Annual Meeting of Stockholders on June 3, 2026
Solicited on Behalf of the Board of Directors

The undersigned stockholder(s) hereby revoke(s) all previous proxies, acknowledge(s) receipt of the Notice of the 2026 Annual Meeting of Stockholders of Neurogene Inc., the accompanying Proxy Statement and the 2025 Annual Report, and hereby appoint(s) Rachel McMinn, and Donna Cochener, or either of them, as proxies of the undersigned, each with the power to appoint her substitute, and hereby authorize(s) them, or either of them, with the power to act without the other, to represent and to vote, as designated on the reverse side of this ballot, all of the shares of Common Stock of Neurogene Inc. that the undersigned stockholder(s) is/are entitled to vote at the 2026 Annual Meeting of Stockholders of Neurogene Inc. to be held at 9:00 a.m. Eastern Time on June 3, 2026, or any adjournment or postponement thereof.

The shares represented by this proxy, when properly executed, will be voted in the manner directed by the stockholder(s). If no such direction is made, but the card is signed, this proxy will be voted FOR both of the nominees listed in Proposal No. 1, FOR Proposal Nos. 2 and 3, and 1 Year for Proposal 4 and in the discretion of the proxies with respect to such other business as may properly come before the meeting or any adjournment or postponement thereof. In the event that any of the nominees named on the reverse side of this card are unavailable for election or unable to serve, the shares represented by the proxy may be voted for a substitute nominee selected by the Board of Directors.

Continued and to be signed on reverse side

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