UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 14A

(Rule 14a-101)
INFORMATION REQUIRED IN PROXY STATEMENT
SCHEDULE 14A INFORMATION
Proxy Statement Pursuant to Section 14(a) of the
Securities Exchange Act of 1934

(Amendment No.)

| File | Filed by the Registrant ⊠ | | | | | |
|------|---|--|--|--|--|--|
| File | Filed by a Party other than the Registrant \Box | | | | | |
| Che | ck the appropriate box: | | | | | |
| | Preliminary Proxy Statement | | | | | |
| | Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2)) | | | | | |
| X | Definitive Proxy Statement | | | | | |
| | Definitive Additional Materials | | | | | |
| | Soliciting Material under § 240.14a-12 | | | | | |
| | Sage Therapeutics, Inc. (Name of Registrant as Specified In Its Charter) (Name of Person(s) Filing Proxy Statement, if other than Registrant) | | | | | |
| Payı | Payment of Filing Fee (Check all boxes that apply): | | | | | |
| X | 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. | | | | | |



SAGE THERAPEUTICS, INC. 215 FIRST STREET CAMBRIDGE, MA 02142

NOTICE OF 2023 ANNUAL MEETING OF STOCKHOLDERS

We invite you to attend the 2023 Annual Meeting of Stockholders, or Annual Meeting, of Sage Therapeutics, Inc. (referred to as "we," "us," the "Company" or "Sage") which will be held online via live webcast on Thursday, June 15, 2023, at 8:30 a.m. Eastern Time. You may attend the meeting virtually via the Internet at www.virtualshareholdermeeting.com/SAGE2023, where you will be able to vote electronically. You will need the 16-digit control number included with these proxy materials to attend the Annual Meeting.

The purpose of the Annual Meeting is to take the following actions:

- 1. to elect four directors, Michael F. Cola, Barry E. Greene, Jeffrey M. Jonas, M.D., and Jessica J. Federer, each to serve as a Class III director until the 2026 annual meeting of stockholders and until his or her successor is duly elected and qualified, subject to his or her earlier death, resignation, or removal;
- 2. to ratify the appointment of PricewaterhouseCoopers LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2023;
- 3. to hold a non-binding advisory vote to approve the compensation paid to our named executive officers;
- 4. to approve an amendment to our 2014 Employee Stock Purchase Plan, as amended, or the 2014 ESPP, to increase the number of shares of our common stock authorized for issuance under the 2014 ESPP by 500,000 shares; and
- 5. to transact such other business as may properly come before the meeting or any and all adjournments or postponements thereof.

The Annual Meeting will be held over the Internet in a virtual meeting format, via live webcast. There will be no in-person meeting, and you will only be able to attend the Annual Meeting virtually via the webcast. Only our stockholders of record at the close of business on April 17, 2023, will be entitled to vote at the Annual Meeting and any adjournment or postponement thereof. A complete list of registered stockholders will be available at our principal executive offices during ordinary business hours for examination by any stockholder of record for a period of ten days ending on the day before the Annual Meeting.

We have elected to provide access to our proxy materials over the Internet under the Securities and Exchange Commission's, or SEC's, "notice and access" rules. On or about April 27, 2023, we will mail to our stockholders a Notice of Internet Availability of Proxy Materials, or Notice, containing instructions on how to access our proxy materials, including our proxy statement and our 2022 Annual Report to Stockholders, or 2022 Annual Report. We believe that providing our proxy materials over the Internet expedites stockholders' receipt of proxy materials, lowers printing and distribution costs and reduces the environmental impact of our annual meeting. The Notice also instructs you on how to submit your proxy or voting instructions through the Internet.

The Notice also contains instructions on how to request a paper copy of our proxy materials and our 2022 Annual Report. Other stockholders, in accordance with their prior requests, have received e-mail access to our proxy materials and instructions to submit their vote via the Internet, or have been mailed paper copies of our proxy materials and a proxy card or voting instruction form.

Your vote is important. Whether or not you plan to participate in the virtual Annual Meeting, we hope you will take the time to vote your shares. To ensure that your vote is recorded promptly, please vote as soon as possible, even if you plan to attend the meeting.

By Order of the Board of Directors,

/s/ Barry E. Greene

Chief Executive Officer and Director April 27, 2023

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PROXY STATEMENT SUMMARY

The summary highlights certain information related to topics discussed throughout this Proxy Statement. This summary does not contain all of the information that you should consider, and you should read the entire Proxy Statement carefully before voting.

VIRTUAL ANNUAL MEETING INFORMATION

Date: Thursday, June 15, 2023 **Time:** 8:30 a.m. Eastern Time

Location: Online at www.virtualshareholdermeeting.com/SAGE2023

Because the Annual Meeting is being held virtually, you will not be able to attend the Annual Meeting in person.

Record Date: April 17, 2023

HOW TO VOTE

| By Internet | By telephone | By mailing your Proxy Card | During the meeting |
|--|--|--|--|
| | (()) | | <u> </u> |
| Visit 24/7 www.proxyvote.com | Dial toll-free 24/7 1-800-690-6903 | Cast your ballot, sign your proxy card and send by free post | Vote during the live webcast of the Annual Meeting |
| You may vote by Internet 24 hours a day, seven days per week. You will need the 16-digit control number included on your Notice, proxy card or voting instruction form. Votes submitted through the Internet must be received by 11:59 p.m. Eastern Time on June 14, 2023. | You may vote using a touch-tone telephone by calling 24 hours a day, seven days a week. You will need the 16-digit control number included on your Notice, proxy card or voting instruction form. Votes submitted by telephone must be received by 11:59 p.m. Eastern Time on June 14, 2023. | If you received printed proxy materials, you may submit your vote by completing, signing and dating your proxy card or voting instruction form and returning it in the prepaid envelope. Proxy cards submitted by mail must be received no later than June 14, 2023. | You may vote during the Annual Meeting by going to: www.virtualshareholdermeeting.com/SAGE2023. You will need the 16-digit control number included on your Notice, proxy card or voting instruction form. If you previously voted via the Internet, by telephone, or by mail, that vote will not limit your right to vote online at the Annual Meeting. |

If you plan to attend the Annual Meeting, we recommend that you visit the link for the live webcast at www.virtualshareholdermeeting.com/SAGE2023 and log in with your 16-digit control number prior to the start time of 8:30 a.m. Eastern Time to ensure you are fully logged in when the Annual Meeting begins. If you attend the Annual Meeting, you may vote your shares electronically during the Annual Meeting even if you have previously returned your proxy card or completed your proxy by phone or on the Internet. Stockholders wishing to vote their shares electronically during the Annual Meeting should refer to their Notice for instructions regarding voting electronically during the Annual Meeting.

A summary of the information you need to attend the Annual Meeting online is provided below:

- Any stockholder as of the record date may listen to the Annual Meeting and participate live via webcast at www.virtualshareholdermeeting.com/SAGE2023.
- To enter the Annual Meeting, please have your 16-digit control number ready, which is available on your Notice, proxy card or voting instruction form.

- You may vote and submit questions during the Annual Meeting by following the instructions on the log-in page for the webcast.
- If you encounter any technical difficulties or trouble accessing the live webcast of the Annual Meeting or other technical issues during
 the Annual Meeting, please call the technical support number that will be posted on the log-in page for the Annual Meeting for
 assistance.

CAST YOUR VOTE RIGHT AWAY

Please cast your vote right away on all of the proposals listed below to ensure that your shares are represented.

PROPOSAL 1:

Election of Four Class III Directors

PROPOSAL 2:

Ratification of the appointment of Pricewaterhouse Coopers LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2023

PROPOSAL 3:

Advisory vote to approve the compensation paid to our named executive officers **PROPOSAL 4**:

Approval of an amendment to the 2014 ESPP to increase the number of shares of our common stock authorized for issuance under the 2014 ESPP by 500,000 shares

| More Information | Board of Directors Recommendation |
|------------------|--------------------------------------|
| Page 12 | FOR each nominee |
| Page 31 | FOR |
| Page 33 | FOR |
| Page 34 | FOR |

STOCKHOLDER ENGAGEMENT AND GOVERNANCE HIGHLIGHTS

Stockholder Engagement

We believe that effective corporate governance includes active and regular engagement with our stockholders, and we are committed to investing time with our stockholders to increase transparency and gain a better understanding of the practices our stockholders most value. We seek to conduct a robust stockholder outreach program to solicit and understand our stockholders' perspectives on our executive compensation, corporate governance and disclosure practices. Our Board of Directors, the Compensation Committee of our Board of Directors, or our Compensation Committee, and the Nominating and Corporate Governance Committee of our Board of Directors, or our Nominating and Corporate Governance Committee, consider feedback received from this effort and other input from our stakeholders and advisors in determining what further governance and compensation actions, if any, are in the best interest of the Company and its stockholders.

Between mid-2022 and early 2023, we solicited feedback from stockholders representing approximately 86% of our outstanding shares based on public filings as of December 31, 2022 and engaged with stockholders then representing approximately 67% of our outstanding shares to seek input on our corporate governance and compensation matters. The key topics discussed included executive compensation, board composition, diversity, and our environmental, social and governance, or ESG, strategy. We value the variety of perspectives we receive during these discussions and the opportunity they present to deepen our understanding of stockholder interests and explain our motivations and priorities with respect to our governance and compensation practices.

We intend to continue our stockholder outreach following the filing of this Proxy Statement with the SEC, to seek support for the Annual Meeting proposals and to solicit additional feedback regarding governance and compensation matters of importance to our stockholders, as well as following the Annual Meeting regardless of the vote results on the proposals included herein.



Governance Highlights

We are committed to maintaining strong corporate governance practices and regularly reviewing our corporate governance practices to continue building on our success and long-term stockholder value. The highlights of our corporate governance practices include the following:

Governance Highlights

- All of our directors are independent, other than Barry E. Greene, our Chief Executive Officer, and Jeffrey M. Jonas, M.D., our former Chief Innovation Officer
- We have an independent Chair of our Board of Directors that is separate from the Chief Executive Officer position
- We have adopted a robust Code of Business Conduct and Ethics, called our Values Code and which we refer to in this Proxy Statement as our Values Code, and Corporate Governance Guidelines. We made updates to our Values Code in 2022 to better align with our corporate values and mission statement. Our Values Code and Corporate Governance Guidelines are each published on our website at http://investor.sagerx.com/corporate-qovernance
- All of our directors attended at least 75% of board and committee meetings in 2022, and on average our directors had a 94% attendance rate

Governance Highlights

- 100% independence among members of our Audit, Compensation and Nominating and Corporate Governance Committees
- In December 2022, the Board of Directors amended our Nominating and Corporate Governance Committee charter to include a requirement to instruct any search firm that it engages in a search for Board candidates to include qualified candidates with diversity of race, ethnicity or gender in the pool of candidates for every open board seat, after adopting a director recruitment policy to this effect earlier in 2022; throughout 2022, we joined various organizations in an effort to increase diversity in the director candidate pool and ultimately on our Board of Directors
- We seek annual advisory approval of executive compensation by our stockholders
- We adopted a compensation recoupment policy, or clawback policy, in 2022 with a three-year look-back period
- We do not have a stockholder rights plan, a takeover defense commonly referred to as a "poison pill"
- Our independent directors conduct an annual evaluation of our Chief Executive Officer

- All of our directors meet the director commitment recommendations set forth by the proxy advisory firm Institutional Shareholder Services (ISS) and all but one of our directors meet the director commitment recommendations set forth by proxy advisory firm Glass Lewis
- We increased the proportion of equity awards granted as performance restricted stock units, or PSUs, with vesting based on achievement of long-term goals, with this increase applying to our Chief Executive Officer and our other executive officers, commencing with 2022 compensation; in 2023, we further increased the proportion of equity awards granted as PSUs for our leadership team, with a portion of such PSUs vesting only upon our achievement of certain total stockholder return, or TSR, milestones
- We conduct regular executive sessions of independent directors at meetings of our Board of Directors
- We have adopted executive and non-employee director stock ownership guidelines, overseen by our Compensation Committee
- Our Board of Directors and each of its committees conduct periodic self-evaluations of the Board of Directors and its committees
- We prohibit our insiders, including our executive team, from pledging our securities or purchasing our securities on margin

Nominees for Class III Directors

The names of the nominees for Class III directors and certain information about each as of April 17, 2023, are set forth below.

| Name | Director Since | Age | Independent |
|------------------------|----------------|-----|-------------|
| Michael F. Cola | 2014 | 63 | Yes |
| Barry E. Greene | 2020 | 59 | No |
| Jeffrey M. Jonas, M.D. | 2013 | 70 | No |
| Jessica J. Federer | 2023 | 40 | Yes |

We believe Mr. Cola's qualifications to sit on our Board of Directors include his extensive experience working for various pharmaceutical and biotechnology companies. We believe Mr. Greene's qualifications to sit on our Board of Directors include his extensive experience and leadership in the healthcare and biopharmaceutical industries, including his experience serving as Chief Executive Officer at Sage. We believe Dr. Jonas' qualifications to serve on our Board of Directors include his over 25 years of experience on both the scientific and business sides of the pharmaceutical and healthcare industries, particularly in the central nervous system field, including his past experience serving as Chief Executive Officer and Chief Innovation Officer at Sage. We believe Ms. Federer's qualifications to sit on our Board of Directors include her extensive experience and leadership in the life sciences industry and track record of using technology to help improve access to and provision of healthcare services.

Executive Compensation Highlights

We have a pay-for-performance compensation philosophy, and as a result, we seek to align actual compensation levels for our executive officers, including our named executive officers, with the achievement of corporate goals and individual performance. We had a number of major accomplishments in 2022, including those identified in the table below, which factored into our performance assessment for the purposes of funding our annual bonus incentive plan, or the Annual Bonus Incentive Plan, for 2022 for all employees, including our named executive officers. Our business highlights are more fully discussed in the section of this Proxy Statement entitled "Executive Officer and Director Compensation—Compensation Discussion and Analysis."

Select 2022 Business Highlights

- In December 2022, we and our collaboration partner, Biogen (as defined below), completed submission of a new drug application, or NDA, to the U.S. Food and Drug Administration, or FDA, seeking approval of zuranolone for the treatment of both major depressive disorder, or MDD, and postpartum depression, or PPD, which was accepted for filing and granted priority review by the FDA in February 2023, with a Prescription Drug User Fee Act, as amended, or PDUFA, target action date of August 5, 2023.
- In February 2022, we announced that the CORAL Study, a placebocontrolled Phase 3 clinical trial evaluating a two-week course of
 zuranolone 50 mg, when co-initiated with a newly administered openlabel standard antidepressant therapy, or ADT, compared with openlabel standard of care ADT co-initiated with placebo, as an acute rapid
 response treatment in patients with MDD, met its primary endpoint and
 key secondary endpoint.
- In June 2022, we announced that the SKYLARK Study, a Phase 3
 placebo-controlled clinical trial evaluating a two-week course of
 zuranolone 50 mg in women with PPD, met its primary and all key
 secondary endpoints.

- In 2022, we achieved multiple development milestones evaluating SAGE-718, including:
 - commencement of the placebo-controlled Phase 2 DIMENSION Study and Phase 2 SURVEYOR Study, and the open-label Phase 3 PURVIEW Study of SAGE-718 in patients with Huntington's disease cognitive impairment;
 - announcement of additional results from the open-label Phase 2 PARADIGM Study and commencement of the placebocontrolled PRECEDENT Study in patients with mild cognitive impairment due to Parkinson's disease; and
 - commencement of the placebo-controlled Phase 2a
 LUMINARY Study in patients with mild cognitive impairment and mild dementia due to Alzheimer's disease.
- In May 2022, we initiated an open-label Phase 2 clinical trial designed to evaluate the long-term safety and tolerability of SAGE-324 in patients with essential tremor, with incidence of treatment-emergent adverse events as the primary endpoint.

2022 and Early 2023 Compensation Highlights

- Increased the proportion of equity awards granted as PSUs with vesting based on achievement of long-term goals, commencing with 2022 compensation and further increased the proportion of equity awards granted as PSUs for our leadership team in 2023, with a portion of such 2023 PSUs vesting only upon our achievement of certain TSR milestones.
- Instituted a maximum payout cap of 200% of the bonus target for purposes of Annual Bonus Incentive Plan payouts, commencing with 2022 compensation.
- Adopted a compensation recoupment (clawback) policy in 2022 with a three-year look-back period, which permits us to recover performance-based cash and equity compensation paid to our current or former executive officers in certain cases.

SAGE THERAPEUTICS, INC. PROXY STATEMENT FOR THE 2023 ANNUAL MEETING OF STOCKHOLDERS

GENERAL INFORMATION ABOUT THE ANNUAL MEETING AND VOTING

When are this Proxy Statement and the accompanying materials scheduled to be sent to stockholders?

Pursuant to rules adopted by the SEC, we have elected to provide access to our proxy materials to our stockholders via the Internet. Accordingly, on or about April 27, 2023, we will begin mailing a Notice of Internet Availability of Proxy Materials, or Notice, to our stockholders (other than those who previously requested electronic or paper delivery of proxy materials), directing stockholders to a website where they can access our proxy materials, including this Proxy Statement and our 2022 Annual Report, and view instructions on how to vote online or by telephone. Our proxy materials, including the Notice, this Proxy Statement and the accompanying proxy card or, for shares held in "street name" (held for your account by a broker or other nominee), a voting instruction form, and the 2022 Annual Report, will be mailed or made available to stockholders on the Internet on the same date. All stockholders will have the ability to access the proxy materials on the website referred to in the Notice or request to receive a printed set of the proxy materials. Instructions on how to access the proxy materials over the Internet or to request a printed copy may be found in the Notice.

Why did I receive a Notice of Internet Availability of Proxy Materials instead of a full set of proxy materials?

Pursuant to rules adopted by the SEC, we are providing access to our proxy materials for most stockholders over the Internet rather than printing and mailing our proxy materials. We believe following this process will expedite the receipt of such materials and will help lower our costs and reduce the environmental impact of our annual meeting materials. Therefore, the Notice will be mailed to holders of record and beneficial owners of our common stock starting on or about April 27, 2023. The Notice will provide instructions as to how stockholders may access and review our proxy materials, including this Proxy Statement, the proxy card and our 2022 Annual Report, on the website referred to in the Notice or, alternatively, how to request that a copy of the proxy materials, including a proxy card, be sent to a requesting stockholder by mail. The Notice will also provide voting instructions. In addition, stockholders of record may request to receive the proxy materials in printed form by mail or electronically by e-mail on an ongoing basis for future stockholder meetings. Please note that, while our proxy materials are available at the website referenced in the Notice, and our Notice of the 2023 Annual Meeting of Stockholders, this Proxy Statement and our 2022 Annual Report are available on our website, no other information contained on either website is incorporated by reference in or considered to be a part of this Proxy Statement.

Important Notice Regarding the Internet Availability of Proxy Materials for the Stockholder Meeting to Be Held on June 15, 2023

This Proxy Statement and our 2022 Annual Report are available for viewing, printing and downloading at http://www.proxyvote.com.

A copy of our annual report on Form 10-K for the fiscal year ended December 31, 2022, as filed with the SEC, except for exhibits, will be furnished without charge to any stockholder upon written request to Sage Therapeutics, Inc., 215 First Street, Cambridge, Massachusetts 02142, attention Investor Relations. This proxy statement and our annual report on Form 10-K for the fiscal year ended December 31, 2022 are also available on the SEC's website at http://www.sec.gov.

Where and when is the Annual Meeting?

The Annual Meeting will be held on Thursday, June 15, 2023 at 8:30 a.m. Eastern Time. To afford the same rights and opportunities to participate in the Annual Meeting to all stockholders irrespective of location, the Annual Meeting will be held in a virtual meeting format only, via live webcast on the Internet, with no physical in-person meeting. A summary of the information you need to attend the Annual Meeting online is provided below:

 Any stockholder as of the record date may listen to the Annual Meeting and participate live via webcast at www.virtualshareholdermeeting.com/SAGE2023. The webcast will begin at 8:30 a.m. Eastern Time.

- To enter the Annual Meeting, please have your 16-digit control number ready, which is available on your Notice, proxy card or voting
 instruction form.
- You may vote and submit questions during the Annual Meeting by following the instructions on the log-in page for the webcast.

If you plan to attend the Annual Meeting, we recommend that you visit the link for the live webcast at www.virtualshareholdermeeting.com/SAGE2023 and log in with your 16-digit control number prior to the start time of 8:30 a.m. Eastern Time to ensure you are fully logged in when the Annual Meeting begins. If you attend the Annual Meeting, you may vote your shares electronically during the Annual Meeting even if you have previously returned your proxy card or completed your proxy by phone or on the Internet. Stockholders wishing to vote their shares electronically during the Annual Meeting should refer to their Notice for instructions regarding voting electronically during the Annual Meeting.

What do I need in order to be able to participate in the Annual Meeting online?

You will need the 16-digit control number included on your Notice or your proxy card in order to be able to access the Annual Meeting and vote your shares or submit questions during the Annual Meeting.

What if during the Annual Meeting I have technical difficulties or trouble accessing the live webcast of the Annual Meeting?

If you encounter any technical difficulties or trouble accessing the live webcast of the Annual Meeting or other technical issues during the Annual Meeting, please call the technical support number that will be posted on the log-in page for our virtual Annual Meeting for assistance.

Who is soliciting my vote?

Our Board of Directors is soliciting your vote for the Annual Meeting.

When is the record date for the Annual Meeting?

The record date for determination of stockholders entitled to vote at the Annual Meeting is the close of business on April 17, 2023.

How many votes can be cast by all stockholders?

There were 59,762,001 shares of our common stock, par value \$0.0001 per share, outstanding on April 17, 2023, all of which are entitled to vote with respect to all matters to be acted upon at the Annual Meeting. Each stockholder of record is entitled to one vote for each share of our common stock held by such stockholder. We had no shares of preferred stock outstanding as of April 17, 2023.

How do I vote?

You may vote your shares over the Internet, by telephone or during the Annual Meeting by going to www.virtualshareholdermeeting.com/SAGE2023. If you requested and/or received a printed version of the proxy card, you may also vote by mail.

- **By Internet.** You may vote at *www.proxyvote.com*, 24 hours a day, seven days per week. You will need the 16-digit control number included on your Notice, proxy card or voting instruction form. Votes submitted through the Internet must be received by 11:59 p.m. Eastern Time on June 14, 2023.
- **By Telephone.** You may vote using a touch-tone telephone by calling 1-800-690-6903, 24 hours a day, seven days a week. You will need the 16-digit control number included on your Notice, proxy card or voting instruction form. Votes submitted by telephone must be received by 11:59 p.m. Eastern Time on June 14, 2023.
- **By Mail.** If you received printed proxy materials, you may submit your vote by completing, signing and dating each proxy card received and returning it in the prepaid envelope. Sign your name exactly as it appears on the proxy card. Proxy cards submitted by mail must be received no later than June 14, 2023.

• **During the Annual Meeting.** You may vote during the Annual Meeting by going to www.virtualshareholdermeeting.com/SAGE2023. You will need the 16-digit control number included on your Notice, proxy card or voting instruction form. If you previously voted via the Internet (or by telephone or mail), you will not limit your right to vote online at the Annual Meeting. Online check-in will begin at 8:15 a.m. Eastern Time on June 15, 2023. We will have technicians standing by and ready to assist you with any technical difficulties you may have accessing the virtual Annual Meeting. If you encounter any difficulties accessing the virtual Annual Meeting during the check-in or meeting time, please call the technical support number that will be posted on the log-in page at www.virtualshareholdermeeting.com/SAGE2023.

Voting deadlines and availability of telephone and Internet voting for beneficial owners whose shares are held in street name by a bank, broker or nominee depend on the voting processes of the entity that holds their shares. If your shares are held in street name, we urge you to carefully review and follow the voting instruction form and any other materials that you might receive from the entity that is the record holder of your shares. If your shares are held in street name and your voting instruction form indicates that you may vote those shares through the http://www.proxyvote.com website, then you may join the Annual Meeting with the 16-digit access code indicated on that voting instruction form. Otherwise, stockholders who hold their shares in street name should contact their bank, broker or nominee (preferably at least 5 days before the Annual Meeting) and obtain a "legal proxy" in order to be able to join the Annual Meeting.

If you complete and submit your proxy before the Annual Meeting, the persons named as proxies will vote the shares represented by your proxy in accordance with your instructions. If you submit a proxy without giving voting instructions, your shares will be voted in the manner recommended by the Board of Directors on all matters presented in this Proxy Statement, and as the persons named as proxies may determine in their discretion with respect to any other matters properly presented at the Annual Meeting. You may also authorize another person or persons to act for you as proxy in writing, signed by you or your authorized representative, specifying the details of those proxies' authority. The original writing must be given to each of the named proxies, although it may be sent to them by electronic transmission if, from that transmission, it can be determined that the transmission was authorized by you.

If any other matters are properly presented for consideration at the Annual Meeting, including, among other things, consideration of a motion to adjourn the Annual Meeting to another time or place (including, without limitation, for the purpose of soliciting additional proxies), the persons named in your proxy and acting thereunder will have discretion to vote on those matters in accordance with their best judgment. We do not currently anticipate that any other matters will be raised at the Annual Meeting.

How do I revoke my proxy?

If your shares are registered directly in your name, you may revoke your proxy and change your vote at any time before the Annual Meeting. To do so, you must do one of the following:

- Vote over the Internet or by telephone as instructed above. Only your latest Internet or telephone vote is counted. You may not change your vote over the Internet or by telephone after 11:59 p.m. Eastern Time on June 14, 2023.
- Sign a new proxy and submit it as instructed above. Only your latest dated proxy, to be received no later than June 14, 2023, will be counted.
- Participate in the Annual Meeting virtually via the Internet and vote again. Participating in the Annual Meeting will not revoke your Internet vote, telephone vote or proxy, unless you vote again.

If a broker, bank, or other nominee holds your shares, you must contact such broker, bank, or nominee in order to find out how to change your vote.

How is a quorum reached?

Our Amended and Restated Bylaws, or Bylaws, provide that a majority of the shares entitled to vote, present at the Annual Meeting or represented by proxy, will constitute a quorum for the transaction of business at the Annual Meeting.

Your shares will be counted towards the quorum only if you submit a valid proxy (or one is submitted on your behalf by your brokerage firm, bank, dealer or other agent) or if you vote online during the Annual Meeting. Under the General Corporation Law of the State of Delaware, or the DGCL, shares that are voted "abstain" or "withheld" and, in specified circumstances, broker "non-votes," are counted as present for purposes of determining whether a quorum is present at the Annual Meeting. If there is no quorum, the holders of a majority of shares present by virtual attendance at the Annual Meeting or represented by proxy may adjourn the Annual Meeting to another date.

How is the vote counted?

In accordance with our Bylaws, directors are elected by a plurality of the votes properly cast by the stockholders entitled to vote on the election of directors at the Annual Meeting. Under our Bylaws, any proposal other than an election of directors is decided by a majority of the votes properly cast for and against such proposal, except where a larger vote is required by law or by our Amended and Restated Certificate of Incorporation, or Certificate of Incorporation, or our Bylaws. Therefore, at the Annual Meeting, the four nominees receiving the most votes FOR election will be elected as directors (Proposal 1), and each other proposal will be approved if a majority of the votes properly cast are voted FOR the proposal (Proposals 2, 3, and 4). Abstentions and broker "non-votes" are not included in the tabulation of the voting results on any such proposal and, therefore, do not have an impact on such proposals. A broker "non-vote" occurs when a nominee holding shares for a beneficial owner does not vote on a particular proposal because the nominee does not have or did not exercise discretionary voting power with respect to that matter or has not received instructions from the beneficial owner.

If your shares are held in street name by a brokerage firm, your brokerage firm is required to vote your shares according to your instructions. If you do not give instructions to your brokerage firm, the brokerage firm will still be able to vote your shares with respect to "discretionary" matters, but will not be allowed to vote your shares with respect to "non-discretionary matters." Proposals 1, 3, and 4 are non-discretionary matters. If you do not instruct your broker how to vote with respect to those proposals, your broker may not vote for those proposals, and those votes will be counted as broker "non-votes." Proposal 2 is considered to be a discretionary matter, and your brokerage firm will be able to vote on this proposal even if it does not receive instructions from you.

Who pays the cost for soliciting proxies?

We are making this solicitation and will pay the entire cost of preparing and distributing the Notice and our proxy materials and soliciting votes. If you choose to access the proxy materials or vote over the Internet, you are responsible for any Internet access charges that you may incur. Our officers and employees may, without compensation other than their regular compensation, solicit proxies through further mailings, personal conversations, facsimile transmissions, e-mails, or otherwise. Proxy solicitation expenses that we will pay include those for preparation, mailing, returning, and tabulating the proxies. We have engaged Alliance Advisors to assist in the solicitation of proxies and provide related advice and informational support, for a services fee, plus customary expense disbursements, which are not expected to exceed \$17,000 in total.

How are matters submitted for consideration at an annual meeting?

Stockholder proposals intended to be presented at the next annual meeting of our stockholders after the upcoming Annual Meeting must satisfy the requirements set forth in the advance notice provisions under our Bylaws. To be timely for our next annual meeting of stockholders, any such proposal must be delivered in writing to our Secretary at 215 First Street, Cambridge, Massachusetts 02142 between the close of business on February 16, 2024, and March 17, 2024. If the next annual meeting of the stockholders is scheduled to take place before May 16, 2024, or after August 14, 2024, notice by the stockholder must be delivered no later than the close of business on the later of (1) the 90th day prior to such annual meeting or (2) the 10th day following the day on which public announcement of the date of such meeting is first made.

In addition to satisfying the advance notice provisions in our Bylaws relating to nominations of director candidates, including the earlier notice deadlines set out above, to comply with the SEC's universal proxy rule, stockholders who intend to solicit proxies in support of director nominees other than the Company's nominees in compliance with Rule 14a-19 under the Securities Exchange Act of 1934, as amended, or the Exchange Act, at the next annual meeting of stockholders after the upcoming Annual Meeting must also provide notice that sets forth the information required by

Rule 14a-19 no later than April 16, 2024. If the date of the 2024 annual meeting of stockholders changes by more than 30 calendar days from the date of the 2023 annual meeting of stockholders, such notice must instead be provided by the later of 60 calendar days prior to the date of the 2024 annual meeting of stockholders or the 10th calendar day following public announcement by the Company of the date of the 2024 annual meeting of stockholders.

In addition, any stockholder proposal intended to be included in the proxy statement for the next annual meeting of our stockholders in 2024 must satisfy the requirements of Rule 14a-8 under the Exchange Act and be received not later than December 29, 2023. If the date of such annual meeting is moved by more than 30 days from the date contemplated at the time of the previous year's proxy statement, then notice must be received within a reasonable time before we begin to print and send proxy materials. If that happens, we will publicly announce the deadline for submitting a proposal in a press release or in a document filed with the SEC.

What does it mean if I receive more than one Notice?

If you receive more than one Notice, your shares may be registered in more than one name or in different accounts. Please follow the voting instructions on each Notice to ensure that all of your shares are voted.

How can I find out the results of the voting at the Annual Meeting?

Preliminary voting results will be announced at the Annual Meeting. In addition, final voting results will be published in a current report on Form 8-K that we expect to file with the SEC within four business days after the Annual Meeting.

OVERVIEW OF PROPOSALS

This Proxy Statement contains four proposals requiring stockholder action, which are as follows:

- **Proposal 1,** which requests the election of four Class III directors to the Board of Directors;
- **Proposal 2**, which requests the ratification of the appointment of PricewaterhouseCoopers LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2023;
- **Proposal 3,** which requests a non-binding advisory vote to approve the compensation of our named executive officers as disclosed in this Proxy Statement; and
- **Proposal 4**, which requests stockholder approval of an amendment to the 2014 ESPP to increase the number of shares of our common stock authorized for issuance under the 2014 ESPP by 500,000 shares.

Each of the above proposals is discussed in more detail in the pages that follow.

PROPOSAL 1

ELECTION OF DIRECTORS

The Board of Directors is divided into three classes. One class is elected each year at the annual meeting of stockholders for a term of three years. Vacancies on the Board of Directors may be filled exclusively by the affirmative vote of a majority of the remaining directors, even if less than a quorum of the Board of Directors, and may not be filled by holders of our common stock. A director elected by the Board of Directors to fill a vacancy in a class shall hold office for the remainder of the full term of that class, and until the director's successor is duly elected and qualified or until his or her earlier death, resignation, or removal.

The terms of the Class III directors are scheduled to expire on the date of the upcoming Annual Meeting. Based on the recommendation of our Nominating and Corporate Governance Committee, the Board of Directors' nominees for election by the stockholders are the following current Class III members: Michael F. Cola, Barry E. Greene, Jeffrey M. Jonas, M.D., and Jessica J. Federer. If elected, each nominee will serve as a director until the annual meeting of stockholders in 2026 and until his or her successor is duly elected and qualified, or until his or her earlier death, resignation, or removal.

The names of and certain information about the directors in each of the three classes are set forth below.

It is intended that proxies will be voted, unless otherwise indicated, for the election of the Class III director nominees to the Board of Directors. Each of the nominees has indicated his or her willingness to serve as a Class III director if elected. We have no reason to believe that any nominee will be unable to serve. If any of the nominees should for any reason be unable or unwilling to serve at any time prior to the Annual Meeting, however, the proxies may be voted for the election of such substitute nominee as the Board of Directors may designate.

Nominees for Class III Directors

The names of the nominees for Class III directors and certain information about each as of April 17, 2023, are set forth below.

| Name | Roles at Sage | Summary Experience | Director Since | Age | Independent |
|------------------------|--|--|-------------------|-----|-------------|
| Michael F. Cola | Chair of the Compensation Committee Member of the Audit Committee Member of the Science and Technology Committee | Over 25 years of senior leadership experience in the pharmaceutical industry Former Chief Executive Officer and Director at Avalo Therapeutics, Inc. (formerly Cerecor, Inc.) Former Chief Executive Officer and Director at Aevi Genomic Medicine, Inc. | 2014 | 63 | Yes |
| Barry E. Greene | Chief Executive Officer | Over 30 years of biopharmaceutical industry experience Former President and Director at Alnylam Pharmaceuticals, Inc. Held senior leadership positions at Millennium Pharmaceuticals, Inc., Mediconsult and AstraZeneca | 2020 | 59 | No |
| Jeffrey M. Jonas, M.D. | Chair of the Science and Technology Committee | Over 25 years of biopharmaceutical industry experience Current Chief Executive Officer at ABio-X, a private biotechnology incubator Former Chief Innovation Officer and former President and Chief Executive Officer at Sage | 2013 | 70 | No |
| Jessica J. Federer | Newly appointed member of the Board of Directors | Over 15 years of experience in the life sciences industry, with a focus on digital innovation Current Managing Partner at Supernode Ventures, an investment fund focused on early-stage technology companies Former Chief Digital Officer at Bayer A.G. | 2023 | 40 | Yes |

Directors Whose Terms Do Not Expire at the Annual Meeting

The names of and certain information as of April 17, 2023 about the members of the Board of Directors who are not standing for re-election at this year's Annual Meeting are set forth below.

| Name | Positions and Offices/Committee Memberships at Sage | Class and Year in Which Term Will Expire | Director Since | Age | Independent |
|--------------------------|---|--|-------------------|-----|-------------|
| Elizabeth Barrett | Member of the Audit CommitteeMember of the Compensation Committee | Class I—2024 | 2019 | 60 | Yes |
| James M. Frates | Chair of the Audit Committee Member of the Compensation Committee | Class II—2025 | 2014 | 55 | Yes |
| Geno Germano | Chair of the Nominating and Corporate Governance Committee | Class I—2024 | 2016 | 62 | Yes |
| George Golumbeski, Ph.D. | Member of the Nominating and Corporate Governance Committee | Class II—2025 | 2019 | 65 | Yes |
| Steven Paul, M.D. | Member of the Nominating and Corporate Governance Committee Member of the Science and Technology Committee | Class I—2024 | 2011 | 72 | Yes |
| Kevin P. Starr | Chair of the Board of Directors | Class II—2025 | 2011 | 60 | Yes |

Biographical Information Concerning Our Board of Directors

Set forth below are the biographies of each director, as well as a discussion of the particular experience, qualifications, attributes, and skills that led our Board of Directors to conclude that each person nominated to serve or currently serving on our Board of Directors should serve as a director. In addition to the information presented below, we believe that each director meets the minimum qualifications established by the Nominating and Corporate Governance Committee for our directors.

Elizabeth (Liz) Barrett. Ms. Barrett has served as a member of our Board of Directors since January 2019. Ms. Barrett has served as President and Chief Executive Officer and a board member of UroGen Pharma Ltd., a commercial-stage biopharmaceutical company since January 2019. She previously served as Chief Executive Officer of Novartis Oncology, or Novartis, from February to December 2018. Prior to Novartis, she was Global President, oncology at Pfizer Inc., or Pfizer, from 2015 to 2018. From 2009 to 2015, she held a series of leadership positions at Pfizer, including President, Europe, Global Innovative Pharma, President, North America, and President, US Oncology business unit. Prior to Pfizer, from 2006 to 2009, Ms. Barrett was Vice President and General Manager of the Oncology business unit at Cephalon Inc. She also held senior roles across multiple market sectors at Johnson & Johnson from 1993 to 2006. In addition, Ms. Barrett has served as a member of the board of directors of Allogene Therapeutics, Inc., a public clinical stage immune-oncology company, since July 2021. Ms. Barrett received a B.S. from the University of Louisiana and an M.B.A. from Saint Joseph's University. We believe Ms. Barrett's qualifications to sit on our Board of Directors include her executive experience and years of leadership in the pharmaceutical industry.

Michael F. Cola. Mr. Cola has served as a member of our Board of Directors since September 2014. He served as Chief Executive Officer and a board member of Avalo Therapeutics, Inc. (formerly Cerecor, Inc.), or Avalo, a biopharmaceutical company, from February 2020 to February 2022. Prior to Avalo, Mr. Cola served as Chief Executive Officer of Aevi Genomic Medicine, Inc., or Aevi, a biopharmaceutical company formerly named Medgenics, Inc. from 2013 to February 2020. Prior to joining Aevi, from 2005 to 2012, he served as president of specialty pharmaceuticals at Shire plc, or Shire, a global specialty pharmaceutical company. Previously, from 2000 to 2005, Mr. Cola served as a Growth Capital Provider and President of the life sciences group for Safeguard Scientifics, Inc., where he served as Chairman and Chief Executive Officer of Clarient, Inc., and Chairman of Laureate Pharma, Inc. In addition, Mr. Cola has held senior positions in product development and commercialization at Astra Merck Inc., where he led Phase 2 through Phase 4 clinical development efforts, and at AstraZeneca plc., where he led clinical development worldwide. He also currently serves on the board of directors of Phathom Pharmaceuticals, Inc., a late-stage biopharmaceutical company. Mr. Cola received a B.A. in biology and physics from Ursinus College and an M.S. in biomedical science from Drexel University. We believe Mr. Cola's qualifications to sit on our Board of Directors include his extensive experience working for various pharmaceutical and biotechnology companies.

James M. Frates. Mr. Frates has served as a member of our Board of Directors since May 2014. Since January 2021, Mr. Frates has served as the Chief Financial Officer of Amylyx Pharmaceuticals, Inc., a pharmaceutical company focused on developing new treatments for amyotrophic lateral sclerosis (ALS), Alzheimer's disease and other neurodegenerative diseases. Mr. Frates previously served as Senior Vice President and Chief Financial Officer of Alkermes plc from September 2011 until January 2021. From 2007 to 2011, Mr. Frates served as Senior Vice President and Chief Financial Officer of Alkermes, Inc. From 1998 to 2007, Mr. Frates served as Vice President, Chief Financial Officer and Treasurer of Alkermes, Inc. From 1992 to 1994 and 1996 to 1998, he was employed at Robertson, Stephens & Company, most recently as a Vice President in Investment Banking. Prior to that time, he was employed at Morgan Stanley & Co. Mr. Frates earned an A.B. in government from Harvard College and an M.B.A. from Harvard Business School. We believe Mr. Frates' qualifications to sit on our Board of Directors include his leadership experience, financial expertise, business judgment and industry knowledge.

Geno Germano. Mr. Germano has served as a member of our Board of Directors since July 2016. Since August 2018, Mr. Germano has served as President and Chief Executive Officer and a board member of Elucida Oncology, Inc., a biotechnology company. He previously served as President of Intrexon Corporation, or Intrexon, a leader in engineering and industrialization of biology, from June 2016 to March 2017. Prior to joining Intrexon, from 2014 to February 2016, Mr. Germano was Group President of the Global Innovative Pharma Business of Pfizer, where he led a growing global \$14 billion business with market-leading medicines and an extensive portfolio of late-stage development candidates in several therapeutic areas. Mr. Germano was also Co-Chair of the Portfolio Strategy and Investment Committee at Pfizer from 2013 to February 2016. Previously, from 2009 through 2013, Mr. Germano

served as President and General Manager of Pfizer's Specialty Care and Oncology business units where he led commercial, medical, and post proof-of-concept pipeline strategy and development across global markets. Additionally, Mr. Germano has served on the board of directors of Precision Biosciences, Inc., a clinical stage biotechnology company, since March 2020, and in the past five years, Mr. Germano served on the boards of directors of Bioverativ Inc. (acquired by Sanofi S.A. in March 2018) and The Medicines Company (acquired by Novartis AG in January 2020). Mr. Germano received his B.S. in Pharmacy from Albany College of Pharmacy. We believe Mr. Germano's qualifications to serve on our Board of Directors include his over 30 years of experience in the pharmaceutical industry and his consistent track record of improving operating performance and increasing shareholder value, including across numerous leadership roles in multiple therapeutic categories and global markets at several pharmaceutical companies.

George S. Golumbeski, Ph.D. Dr. Golumbeski has served as a member of our Board of Directors since January 2019. Since October 2020, Dr. Golumbeski has served as a partner at DROIA Ventures, a venture capital firm focused on therapeutics for oncology and genetic disease, and previously served as the President of GRAIL, Inc., a health-care company focused on the early detection of cancer, from August 2018 to September 2019. From 2009 to April 2018, Dr. Golumbeski was employed by Celgene Corporation, or Celgene, as Executive Vice President of Business Development. Prior to Celgene, Dr. Golumbeski was Vice President of Business Development, Licensing, and Strategy at Novartis. Earlier in his career, he held leadership positions at Elan Pharmaceuticals Inc. and Schwarz Pharma AG, where he focused on neurology and neuropsychiatry therapeutics. Dr. Golumbeski has served on the boards of directors of Shattuck Labs, Inc., a public clinical-stage biotechnology company focused on cancer and autoimmune disease, since January 2018 and MorphoSys AG, a public commercial-stage biopharmaceutical company focused on cancer, since May 2018. He previously served on the board of directors of Enanta Pharmaceuticals, Inc., a public clinical stage biotechnology company focused on viral infections from February 2014 through March 2021. He also serves on the boards of directors of various private companies. Dr. Golumbeski received a B.A. in Biology from the University of Virginia and a Ph.D. in Genetics from the University of Wisconsin—Madison. We believe Dr. Golumbeski's qualifications to sit on our Board of Directors include his years of experience in research and development, business development and leadership at various pharmaceutical companies.

Barry E. Greene. Mr. Greene has served as our Chief Executive Officer and President since December 2020 and as a member of our Board of Directors since October 2020. Mr. Greene served as President of Alnylam Pharmaceuticals, Inc., or Alnylam, a public biopharmaceutical company, from 2007 through September 2020, and served as its Chief Operating Officer from 2003 to September 2016. Prior to Alnylam, he was General Manager of Oncology at Millennium Pharmaceuticals, Inc., a public biopharmaceutical company. Prior to joining Millennium in 2001, Mr. Greene served as Executive Vice President and Chief Business Officer for Mediconsult.com, a healthcare consulting company. Prior to joining Mediconsult.com, Mr. Greene's experience included serving as Vice President of Marketing and Customer Services for AstraZeneca (formerly AstraMerck), a pharmaceutical company; Vice President, Strategic Integration with responsibility for the AstraZeneca North American post-merger integration; and a partner of Andersen Consulting, a consulting company. Mr. Greene has served as a member of the board of directors of Karyopharm Therapeutics, Inc., since 2013 and previously served as a member of the boards of directors of Acorda Therapeutics, Inc., a public biotechnology company focused on nervous system disorders, from January 2007 to August 2021 and BCLS Acquisition Corporation, a former special purpose acquisition company, from October 2020 to October 2022. Mr. Greene received his B.S. in Industrial Engineering from the University of Pittsburgh and served as a Senior Scholar at Duke University's Fuqua School of Business. We believe Mr. Greene's qualifications to sit on our Board of Directors include his extensive experience and leadership in the healthcare and biopharmaceutical industries, including his experience serving as Chief Executive Officer at Sage.

Jeffrey M. Jonas, M.D. Dr. Jonas has served as a member of our Board of Directors since August 2013. Since November 2022, Dr. Jonas has served as Chief Executive Officer and a Director of ABio-X, a private biotechnology incubator. From December 2020 to November 2022, Dr. Jones served as our Chief Innovation Officer. Prior to assuming his role as Chief Innovation Officer, he had served as our President and Chief Executive Officer from August 2013 to December 2020. From 2012 to 2013, Dr. Jonas served as the President of the Regenerative Medicine Division of Shire, and from 2008 to 2012 as Senior Vice President of Research and Development, Pharmaceuticals at Shire. Dr. Jonas served from 2007 to 2008 as the Executive Vice President of Ionis Pharmaceuticals, Inc., formerly known as ISIS Pharmaceuticals, Inc.; from 2006 to 2007 as Chief Medical Officer and Executive Vice President of Forest Laboratories, Inc.; and from 1991 to 1996 in senior-level positions at Upjohn Laboratories. Dr. Jonas also founded AVAX Technologies, Inc. and SCEPTOR Industries, Inc., where he served as the Chief Executive Officer, President and a Director. Dr. Jonas currently

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serves on the board of directors of Generation Bio Co., a public biotechnology company, Karuna Therapeutics, Inc., or Karuna, a public biopharmaceutical company, and Noema Pharma AG, a private biotechnology company. Dr. Jonas has authored more than 200 books, provided guidance on scientific articles and abstracts, and has received numerous awards. Dr. Jonas received his B.A. from Amherst College and M.D. from Harvard Medical School. He completed a residency in psychiatry at Harvard Medical School, and he served as Chief Resident in psychopharmacology at McLean Hospital, Harvard Medical School. We believe Dr. Jonas' qualifications to serve on our Board of Directors include his over 20 years of experience on both the scientific and business sides of the pharmaceutical and healthcare industries, particularly in the central nervous system field, including his past experience serving as Chief Executive Officer and Chief Innovation Officer at Sage.

Steven Paul, M.D. Dr. Paul has served as a member of our Board of Directors since September 2011. Since January 2023, Dr. Paul has served as President of Research and Development and Chief Scientific Officer at Karuna. From August 2018 to January 2023, Dr. Paul served as the Chief Executive Officer and chairman of the board of directors of Karuna. Prior to joining Karuna, Dr. Paul was the President and Chief Executive Officer of biopharmaceutical company Voyager Therapeutics, Inc., or Voyager, holding that position from September 2014 to July 2018. Since September 2010, Dr. Paul has also served as a venture partner at Third Rock Ventures, LLC, or Third Rock Ventures, a life sciences venture capital firm. From 2011 to 2014, he was a professor of neuroscience, psychiatry and pharmacology at Weill Cornell Medical College. From 2003 to 2010, Dr. Paul, as the Executive Vice President of Eli Lilly and Company, or Eli Lilly, and President of Lilly Research Laboratories, was responsible for Eli Lilly's overall research and development efforts. Dr. Paul held several key leadership roles during his 17 years at Eli Lilly, including Vice President of Neuroscience (CNS) Research and Group Vice President of Discovery Research (all therapeutic areas) from 1993 to 2003. Prior to Eli Lilly, from 1988 to 1993, Dr. Paul served as Scientific Director of the National Institute of Mental Health (NIMH). Dr. Paul also served as Medical Director in the Commissioned Corps of the United States Public Health Service. Dr. Paul has been the recipient of many awards and honors and has served on numerous committees and advisory boards. Dr. Paul has also authored or co-authored over 500 papers and book chapters. Dr. Paul is an elected fellow of the American Association for the Advancement of Science and a member of the National Academy of Medicine. In addition to serving on Karuna's board of directors since March 2018, he is also currently on the board of directors or is a trustee of several organizations, including the Foundation for the National Institutes of Health, or NIH, and previously served on the board of directors of Alnylam from September 2010 to April 2022 and the board of directors of Voyager from September 2014 to June 2022. Dr. Paul has also served as a member of the National Institute of General Medical Sciences Advisory Council and was appointed by the Secretary of the Department of Health and Human Services as a member of the advisory committee to the Director of the NIH from 2001 to 2006. Dr. Paul was also a member of the National Advisory Mental Health Council, and is board certified by the American Board of Psychiatry and Neurology. Dr. Paul received his B.A. in Biology and Psychology from Tulane University and his M.S. and M.D. degrees from the Tulane University School of Medicine. We believe Dr. Paul's qualifications to sit on our Board of Directors include his extensive career in neuroscience and his leadership and managerial experiences at various pharmaceutical and biotechnology companies and healthcare organizations.

Kevin P. Starr. Mr. Starr has served as a member of our Board of Directors since September 2011. From October 2011 to August 2013, he also served as our interim Chief Executive Officer. In 2007, Mr. Starr co-founded Third Rock Ventures, a venture capital firm where he remains a partner. From 2003 to 2007, Mr. Starr undertook a number of entrepreneurial endeavors in the life science and entertainment industries. From 2001 to 2002, Mr. Starr served as Chief Operating Officer of Millennium Pharmaceuticals, Inc., or Millennium. He also served as Millennium's Chief Financial Officer from 1998 to 2002. Mr. Starr has served on the boards of directors of Alnylam from September 2003 through March 2018 and MyoKardia, Inc. from June 2012 through March 2018. Mr. Starr received an M.S. in corporate finance from Boston College and a B.S./B.A. in mathematics and business from Colby College. We believe Mr. Starr's qualifications to serve on our Board of Directors include his executive management roles with responsibility over key financial and business planning functions and experience in the formation, development and business strategy of multiple start-up companies in the life sciences sector.

Jessica J. Federer. Ms. Federer has served as a member of our Board of Directors since March 2023. Ms. Federer has served as a Managing Partner at Supernode Ventures, an investment fund focused on early stage technology companies, with a concentration on health and women, since September 2022. She previously served as Partner at Boston Millennia Partners, an investment fund focused on technology designed to improve research and care, with a concentration on clinical research organizations, from May 2017 to September 2022. Prior to Boston Millennia

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Partners, Ms. Federer served as Chief Digital Officer at Bayer A.G. from October 2014 to January 2017, and in other leadership roles in regulatory affairs, market access, communications, and public affairs at Bayer A.G. beginning in 2008. Ms. Federer has served as a board member of Pluto Health, a private company focused on improving research and care through data collection, integration and automation, since September 2022. Ms. Federer served on the United Nations International Telecommunication Union (ITU) advisory board from July 2016 to July 2018. She began her public health career as an analyst at the Agency for Healthcare Research and Quality in the US Department of Health and Human Services. Ms. Federer received a B.S. from the George Washington University and a M.P.H. from Yale University. We believe Ms. Federer's qualifications to sit on our Board of Directors include her extensive experience and leadership in the life sciences industry and track record of using technology to help improve access and

Vote Required and Board of Directors' Recommendation

Directors will be elected by a plurality of the votes cast by the stockholders entitled to vote on this proposal at the Annual Meeting, which means that the four nominees receiving the most votes FOR election will be elected. Broker non-votes will not affect the outcome of the election, and proxies marked to withhold authority with respect to one or more nominees will not affect the outcome of the election for such nominees.

The proposal for the election of directors relates solely to the election of Class III directors nominated by our Board of Directors.

Our Board of Directors recommends that stockholders vote "FOR" the election of each of the Class III director nominees listed above.

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CORPORATE GOVERNANCE

Board and Committee Matters

Board Leadership and Independence. Our Board of Directors has determined that all members of the Board of Directors, except Mr. Greene and Dr. Jonas, are independent, as determined in accordance with the rules of the Nasdaq Stock Market, or Nasdaq. In making such independence determination, the Board of Directors considered the relationships that each such non-employee director has with us and all other facts and circumstances that the Board of Directors deemed relevant in determining his or her independence, including the beneficial ownership of our common stock by each non-employee director. In considering the independence of our directors, our Board of Directors considered the association of our directors with the holders of more than 5% of our common stock. There are no family relationships among any of our directors or executive officers.

The positions of our Chair of the Board of Directors, or Chair of the Board, and Chief Executive Officer are presently separated. Separating these positions allows our Chief Executive Officer to focus on our day-to-day business, while allowing the Chair of the Board to lead the Board of Directors in its fundamental role of providing advice to and independent oversight of management. Our Board of Directors recognizes the time, effort and energy that the Chief Executive Officer must devote to the position, as well as the commitment required to serve as the Chair of the Board, particularly as the Board of Directors' oversight responsibilities continue to grow. Our Board of Directors also believes that this structure ensures a greater role for the non-management directors in the oversight of the Company and active participation of the independent directors in setting agendas and establishing priorities and procedures for the work of our Board of Directors. Our Board of Directors believes its administration of its risk oversight function has not been affected by its leadership structure. Although our Bylaws do not require our Chair of the Board and Chief Executive Officer positions to be separate, our Board of Directors believes that having separate positions is the appropriate leadership structure for us at this time.

Classified Board Structure. Our Board of Directors currently consists of ten members and is currently divided into three classes with each of Class I and Class II consisting of three directors and Class III consisting of four directors. Each class has a three-year term. At each annual meeting of our stockholders, the successors to directors whose terms then expire will be elected to serve from the time of election until the third annual meeting following the election. Any additional directorships resulting from an increase in the number of directors will be distributed among the three classes so that, as nearly as possible, each class will consist of one-third of our directors. Vacancies on our Board of Directors may be filled only by persons elected by a majority of the remaining directors. A director elected by the Board of Directors to fill a vacancy in a class, including vacancies created by an increase in the number of directors, shall serve for the remainder of the full term of that class and until the director's successor is duly elected and qualified.

Our Nominating and Corporate Governance Committee and our Board of Directors continue to believe that our classified board structure remains in the best interests of our business and our stockholders, and a prudent protection for a company of our size and stage of development, for the following key reasons:

- <u>Strategic Leadership and Institutional Knowledge</u>. In light of the operational challenges, complexities and overall long-term nature of a business competing in our industry, our Board of Directors believes that experienced directors who are knowledgeable about our business are a valuable resource that can help promote the short- and long-term interests of our stockholders. A three-year term helps ensure that at least a majority of our Board of Directors at any given time will have experience with and a thorough knowledge of our business and a deep understanding of our strategic goals, promoting stability on the Board of Directors and allowing any new directors to learn from continuing directors.
- <u>Protection of Stockholder Value</u>. With only approximately one-third of our directors up for election each year, a classified board structure helps protect and potentially maximize stockholder value by safeguarding our business against hostile or potentially unfair third-party takeover attempts, since a change to majority control of our Board of Directors would require a longer period of time to implement. As a result, while a classified board does not prevent unsolicited acquisition proposals, we believe it would encourage a potential acquiror to negotiate with our Board of Directors, which would allow us the valuable opportunity to consider alternatives that may maximize stockholder value.
- <u>Accountability to Stockholders</u>. A classified board continues to have fiduciary duties under the DGCL and remains accountable to our stockholders. Our Board of Directors has implemented a number of measures

to promote accountability of board members, including adoption of our Values Code, and a required annual self-evaluation of our Board of Directors and its committees led by our Nominating and Corporate Governance Committee. In addition, because it is our intent to maintain three classes of our Board of Directors that each contain as equal a number of directors as is practicable, a majority of our Board of Directors stands for election during any two-year period, which helps protect the interest of our stockholders.

Notably, as of the date of our last assessment of our peers in March 2023, over 75% of the companies in our 2023 Peer Group, which is described below under "Executive Officer and Director Compensation—Compensation Discussion and Analysis," had classified boards. As described further below, our 2023 Peer Group reflects a different composition of companies as compared to our 2022 Peer Group. Our Board of Directors will continue to periodically assess the value of a classified Board to determine whether it remains in the best interests of our business and our stockholders.

Plurality Voting. Pursuant to our Bylaws, directors are elected by a plurality of the votes properly cast by the stockholders entitled to vote on the election of directors at each annual meeting of stockholders. This means that the nominees who receive the greatest number of votes are elected. Our Nominating and Corporate Governance Committee seeks to nominate directors that serve the best interests of our business and our stockholders. Our Board of Directors believes that plurality voting is in our best interests and the best interests of our stockholders because it avoids the possible consequences of a "failed election," such as an unanticipated vacancy that could impact our ability to comply with applicable Nasdaq listing standards or securities laws with respect to committee composition or director independence, by significantly increasing the likelihood that all open positions are filled at each director election.

We believe stockholders continue to have a strong voice in our director elections. Stockholders may use the "withhold" vote as a means to communicate dissatisfaction with a director nominee or our Board of Directors as a whole. For example, in 2021, in direct response to stockholder feedback regarding director commitments, including by way of withholding majority support for a director nominee, our Nominating and Corporate Governance Committee determined that, going forward, in the event that any director nominee were to receive less than majority stockholder support at a Sage annual meeting of stockholders as an apparent result of his or her number of other board memberships, our Board of Directors would evaluate the director nominee's other commitments and assess his or her ability to dedicate the requisite time and attention to our business in order to effectively fulfill his or her responsibilities as a member of our Board of Directors.

While over 75% of companies in our 2023 Peer Group use plurality voting as of the date of our last assessment in March 2023, our Board of Directors will continue to periodically assess its value and remains open to stockholder feedback on this matter.

Supermajority Voting Standards in Governing Documents. As required by the DGCL, any amendment of our Certificate of Incorporation must first be approved by a majority of our Board of Directors, and if required by law or our Certificate of Incorporation, must thereafter be approved by a majority of the outstanding shares entitled to vote on the amendment. An amendment to our Certificate of Incorporation relating to stockholder actions, provisions concerning the structure and composition of our Board of Directors, limitation of liability and additional amendments to our Certificate of Incorporation must be approved by not less than 75% of the outstanding shares entitled to vote on the amendment. Our Bylaws may be amended (i) by the affirmative vote of a majority of the directors then in office, subject to any limitations set forth in our Bylaws, (ii) by the affirmative vote of at least 75% of the outstanding shares entitled to vote on the amendment, by the affirmative vote of the majority of the outstanding shares entitled to vote on the amendment. In addition, our Certificate of Incorporation provides that directors may be removed only for cause and then only by the affirmative vote of the holders of 75% or more of the shares then entitled to vote at an election of directors.

Our Board of Directors continues to believe that the supermajority voting standards in our Certificate of Incorporation and Bylaws are in the best interests of the Company and stockholders. These standards ensure that a large majority of stockholders are in alignment with any stockholder action to change our fundamental corporate documents or remove a director. In addition, supermajority voting standards can help safeguard the business against potentially unfair or hostile third-party takeover attempts, encouraging potential acquirors to communicate with our Board of Directors, who may then consider appropriate alternatives and maximize stockholder value for all stockholders.

Of the 2023 Peer Group, all but one have supermajority voting standards for fundamental corporate changes as of the date of our last assessment in March 2023. Our Board of Directors will continue to periodically assess the value of these standards to stockholder value.

Board Meetings and Committees. Our Board of Directors held seven meetings during 2022. The directors regularly hold executive sessions comprised of only independent directors at meetings of the Board of Directors. During 2022, none of our directors then in office attended less than 75% of the aggregate of all meetings of the Board of Directors and all meetings of the committees of our Board of Directors on which such director then served. Continuing directors and nominees for election as directors in a given year are required to attend the annual meeting of our stockholders, barring significant commitments or special circumstances. All of our then-current directors attended the 2022 annual meeting of stockholders.

Our Board of Directors currently has four standing committees: Audit Committee, Compensation Committee, Nominating and Corporate Governance Committee, and Science and Technology Committee.

Audit Committee. The current members of the Audit Committee of our Board of Directors, or our Audit Committee, are Elizabeth Barrett, Michael F. Cola, and James M. Frates. Mr. Frates serves as the Chair of the Audit Committee. Our Board of Directors has determined that each member of the Audit Committee is independent for Audit Committee purposes as that term is defined in the rules of the SEC and the applicable Nasdaq rules, and has sufficient knowledge in financial and auditing matters to serve on the Audit Committee. Our Board of Directors has designated James M. Frates as an "Audit Committee financial expert," as defined under the applicable rules of the SEC.

The Audit Committee's responsibilities include:

- appointing, retaining and terminating, determining the compensation of, and assessing the independence of our independent registered
 public accounting firm;
- pre-approving auditing and permissible non-audit services, and the terms of such services, to be provided by our independent registered public accounting firm;
- reviewing the overall audit plan with our independent registered public accounting firm and members of management responsible for preparing our consolidated financial statements;
- reviewing and discussing with management and our independent registered public accounting firm our annual and quarterly
 consolidated financial statements and related disclosures, as well as critical accounting policies and practices used by us;
- coordinating the oversight and reviewing the adequacy of our internal control over financial reporting;
- establishing policies and procedures for the receipt and retention of accounting-related complaints and concerns;
- recommending, based upon the Audit Committee's review and discussions with management and our independent registered public accounting firm, whether our audited consolidated financial statements shall be included in our Annual Report on Form 10-K;
- monitoring and regularly reporting to our Board of Directors regarding the integrity of our consolidated financial statements and our compliance with legal and regulatory requirements as they relate to our consolidated financial statements and accounting matters;
- preparing the Audit Committee report required by SEC rules to be included in our annual proxy statement;
- reviewing all related person transactions for potential conflict of interest situations and approving all such transactions;
- reviewing and discussing guidelines and policies that govern the process by which our exposure to risk is assessed and managed by
 management, including major financial and cybersecurity risk exposures and the steps that our management has taken to monitor and
 control such exposures;
- establishing expectations for, overseeing, and evaluating the effectiveness of a compliance and ethics program that advances a culture of integrity and upholds our Values Code; and
- conducting or authorizing investigations into any matters within the scope of its responsibilities as it shall deem appropriate.

The Audit Committee held four meetings during 2022. The Audit Committee operates under a written charter that satisfies the applicable standards of the SEC and Nasdaq. A copy of the Audit Committee charter is available on our website at http://investor.sagerx.com/corporate-governance.

Compensation Committee. The current members of the Compensation Committee of our Board of Directors are Elizabeth Barrett, James M. Frates and Michael F. Cola. Mr. Cola serves as the Chair of the Compensation Committee. Our Board of Directors has determined that each member of the Compensation Committee is "independent" as defined in the applicable Nasdaq rules.

The Compensation Committee's responsibilities include:

- annually reviewing and making recommendations to our Board of Directors with respect to corporate goals relevant to the compensation of our executive officers;
- evaluating the performance of our Chief Executive Officer in light of such corporate goals and making recommendations to our Board of Directors with respect to determining the compensation of our Chief Executive Officer;
- reviewing and approving the compensation of our other executive officers and any members of our leadership who report directly to the Chief Executive Officer;
- reviewing and establishing our overall management compensation philosophy and policy;
- overseeing and administering our compensation and similar plans, including reviewing the compensation programs of peer group companies and making recommendations to the Board of Directors in order to ensure that our compensation programs and practices are competitive and supportive of our strategy and objectives;
- reviewing and approving our policies and procedures for the grant of equity-based awards;
- reviewing and making recommendations to the Board of Directors with respect to director compensation:
- reviewing and discussing with management the compensation discussion and analysis to be included in our annual proxy statement or Annual Report on Form 10-K;
- overseeing our compliance with SEC rules regarding stockholder approval of executive compensation matters, including advisory votes on executive compensation, overseeing stockholder engagement on executive compensation matters, and considering any adjustments to executive compensation policies and practices as a result of say-on-pay proposals;
- · establishing and overseeing compliance with stock ownership guidelines for executive officers and non-employee directors; and
- periodically reviewing the succession planning for our Chief Executive Officer and other executive officers and making such recommendations to the Board of Directors as the Compensation Committee deems advisable in order to facilitate the evaluation of potential successors to executive management positions.

The Compensation Committee held six meetings during 2022. The Compensation Committee operates under a written charter adopted by the Board of Directors, which is available on our website at http://investor.sagerx.com/corporate-governance.

Nominating and Corporate Governance Committee. The current members of the Nominating and Corporate Governance Committee are George Golumbeski, Ph.D., Steven Paul, M.D., and Geno Germano. Mr. Germano serves as the Chair of the Nominating and Corporate Governance Committee. Our Board of Directors has determined that each member of the Nominating and Corporate Governance Committee is "independent" as defined in the applicable Nasdaq rules.

The Nominating and Corporate Governance Committee's responsibilities include:

developing and recommending to our Board of Directors criteria for Board of Director and committee membership;

- establishing procedures for identifying and evaluating Board of Director candidates, including nominees recommended by stockholders;
- reviewing the size and composition of the Board of Directors to ensure that it is composed of members containing the appropriate skills and expertise to advise us;
- identifying individuals qualified to become members of the Board of Directors, with a view towards maintaining a highly qualified, impactful Board of Directors with a diversity of experience and perspectives, including diversity with respect to race and gender;
- recommending to the Board of Directors the persons to be nominated for election as directors and to each of the committees of the Board of Directors:
- developing and recommending to the Board of Directors a set of corporate governance guidelines;
- · overseeing the evaluation of the Board of Directors and its committees; and
- periodically reviewing the Board of Directors' leadership structure to assess whether it is appropriate given our specific corporate characteristics and circumstances.

The Nominating and Corporate Governance Committee held three meetings during 2022. The Nominating and Corporate Governance Committee operates under a written charter adopted by the Board of Directors, which is available on our website at http://investor.sagerx.com/corporate-governance.

Science and Technology Committee. The current members of the Science and Technology Committee are Michael F. Cola, Steven Paul, M.D., and Jeffrey M. Jonas, M.D. Dr. Jonas serves as the Chair of the Science and Technology Committee.

The Science and Technology Committee's responsibilities include:

- regularly reviewing our research and development pipeline;
- discussing with our research and development teams, and advising the Board of Directors on, the long-term strategic goals, objectives, quality and direction of our research and development programs;
- discussing and evaluating new and emerging trends in pharmaceutical science, technology and regulation, and advising the Board of Directors in discussions regarding emerging technologies for building our technological strength;
- advising management on approaches to acquiring and maintaining scientific technology positions, and advising the Board of Directors and management on the scientific aspects of business development transactions;
- assisting the Board of Directors with its oversight responsibility for enterprise risk management in areas affecting our research and development;
- discussing with management topics relevant to the Board of Directors' assessment of strategic research and development issues, and
 advising on which topics should be presented to the full Board of Directors, including the quality, direction and competitiveness of our
 research and development programs and pipeline, and our overall intellectual property strategies;
- serving as a forum to engage with our research and development teams in focused discussions on other research, development and technology topics; and
- · reviewing such other topics as delegated to the Science and Technology Committee from time to time by the Board of Directors.

The Science and Technology Committee was established as a committee of the Board of Directors effective in January 2023. The Science and Technology Committee operates under a written charter adopted by the Board of Directors, which is available on our website at http://investor.sagerx.com/corporate-governance.

Director Nomination Process

Our Board of Directors is responsible for filling vacancies on our Board of Directors and for nominating candidates for election by our stockholders each year in the class of directors whose term expires at the relevant annual meeting. The

Board of Directors delegates the selection and nomination process to the Nominating and Corporate Governance Committee, with the expectation that other members of the Board of Directors and management will be requested to take part in the process, as appropriate.

Generally, the Nominating and Corporate Governance Committee identifies candidates for director nominees in consultation with management, through recommendations from members of the Board of Directors, the use of search firms or other advisors, through networking and participation in associations which aim to increase board diversity, or through such other methods as the Nominating and Corporate Governance Committee deems to be helpful to identify candidates. Once candidates have been identified, the Nominating and Corporate Governance Committee confirms that the candidates meet all of the minimum qualifications for director nominees established by the Nominating and Corporate Governance Committee. The Nominating and Corporate Governance Committee may gather information about the candidates through interviews, detailed questionnaires, comprehensive background checks or any other means that the Nominating and Corporate Governance Committee deems to be appropriate in the evaluation process. The Nominating and Corporate Governance Committee then meets as a group to discuss and evaluate the qualities and skills of each candidate, both on an individual basis and taking into account the overall composition and needs of our Board of Directors. Based on the results of the evaluation process, the Nominating and Corporate Governance Committee recommends candidates for approval by the Board of Directors to fill a vacancy or as director nominees for election to the Board of Directors by our stockholders each year in the class of directors whose term expires at the relevant annual meeting.

Qualifications, Criteria and Diversity. In considering whether to recommend any particular candidate for selection by the Board of Directors as a director nominee, the Nominating and Corporate Governance Committee will apply the following criteria that it believes must be met by all directors:

- The nominee must have experience at a strategic or policymaking level in a business, government, non-profit or academic organization of high standing.
- The nominee must be highly accomplished in his or her respective field, with superior credentials and recognition.
- The nominee must be well regarded in the community and have a long-term reputation for high ethical and moral standards.
- The nominee must have sufficient time and availability to devote to the affairs of the Company, particularly in light of the number of boards of directors on which such nominee may serve.
- To the extent such nominee serves or has previously served on other boards, the nominee must have a demonstrated history of actively contributing at board meetings.

Our Board of Directors and Nominating and Corporate Governance Committee believe that it is essential that our directors represent diverse viewpoints with broad experience in areas important to the operation of the Company. We believe that our Board of Directors, taken as a whole, should provide a significant breadth of skills, experience, knowledge, and background that will allow our Board of Directors to advance our strategic objectives and fulfill our responsibilities to our stockholders. In this context, our Nominating and Corporate Governance Committee considers the following qualifications, in addition to the criteria set forth above, when evaluating nominees for our Board of Directors:

- Executive Leadership Experience. Nominees who have served in senior leadership positions, particularly at companies in the
 biotechnology or pharmaceutical industries, have the experience and perspective to understand, analyze and act decisively with
 respect to important operational and policy-related issues that impact us as we grow.
- <u>Biopharmaceutical Industry Experience</u>. Nominees who have experience in the biopharmaceutical industry, and the challenges
 connected with developing and commercializing pharmaceuticals, can provide specialized perspectives on our research and
 development efforts, our commercialization strategy, competing products and product candidates and our overall business landscape.
- <u>Research and Development Experience</u>. Nominees who have advanced education in science or medicine and/or prior experience serving in senior leadership roles directly responsible for a research and

development function in the biotechnology or pharmaceutical industries or in a similar capacity in a hospital or academic institution can provide valuable strategic input on our research and development plans and processes and the complex regulatory environment impacting our business.

- <u>Commercialization Experience</u>. Nominees who have prior experience with commercialization of an approved drug in the U.S. and/or globally can provide valuable strategic input on among other things, commercialization strategies, management of a sales force, and matters related to the pricing and reimbursement of marketed products.
- <u>Financial Expertise</u>. Nominees who have advanced education and/or prior experience in auditing or finance, including being or having been a chief executive officer, chief financial officer or other senior officer with financial oversight responsibilities, bring valuable perspectives about financial operations, analysis and reporting and can help our Board of Directors better understand financial markets and potential financing and investing activities.
- <u>Commitment to our Sage Values Code</u>. We expect all of our directors to have a strong commitment to the principles embodied in our Values Code, which applies to all of our employees, consultants, officers and directors, including those officers responsible for financial reporting. Our Values Code serves as the foundation of our corporate governance principles.

Our Nominating and Corporate Governance Committee is committed to recruitment efforts that focus on highly qualified diverse candidates, including race, ethnicity and gender diversity. In response to stockholder feedback, in January 2022 our Board of Directors adopted a director recruitment policy to instruct any search firm that it engages in a search for Board candidates to include, qualified candidates with diversity of race, ethnicity and gender in the pool from which director candidates are chosen (also known as a "Rooney Rule" policy), and in December 2022, the Board of Directors amended our Nominating and Corporate Governance Committee charter to formalize this requirement. In addition, we have joined various networking organizations in an effort to increase diversity in our director candidate pool and ultimately on our Board of Directors. In March 2023, we appointed another female director to the Board of Directors, further diversifying the Board of Directors' overall skillset and capabilities while also increasing gender diversity on the Board of Directors.

When considering candidates as potential board members, the Board of Directors and the Nominating and Corporate Governance Committee evaluate the candidates' ability to contribute to such diversity.

LGBTQ+ Independence and Tenure Independent

Current Nominee for Director

The table below summarizes certain information regarding the members of our Board of Directors, including specified categories of skills and experience based on the standards described above, certain diversity attributes and other factors important to us when evaluating our Board of Directors as a whole. The table does not summarize all of the skills, experience or diversity attributes applicable to each of our directors and the fact that a particular category of skills and experience or attribute is not listed does not mean that a director does not possess it. Moreover, the absence of a particular category of skills and experience or attribute with respect to any one director does not mean that director does not possess the ability to contribute to strategic decision-making related to that area. The type and degree of skill and experience listed below may vary among each member of our Board of Directors. See each director's biographical information above under the heading "Information Concerning Our Board of Directors."

| Director |
|--|
| Skills and Experience |
| Executive Leadership Experience |
| Biopharmaceutical Industry Experience |
| Research and Development Experience |
| Commercialization Experience |
| Financial Expertise |
| Committed to Principles Embodied in Sage Values Code |
| Gender Identity |
| Male |
| Female |
| Demographic Background |
| African American or Black |
| Asian |
| Hispanic or Latinx |
| White |

| | | | Board Div | versity Matrix | c (As of April 27 | ⁷ , 2023) | | | |
|---------|------|---------|------------------|----------------|-------------------|----------------------|-------|------|-------|
| Barrett | Cola | Federer | Frates | Germano | Golumbeski | Greene | Jonas | Paul | Starr |
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| 4 | 8 | 0 | 8 | 6 | 4 | 2 | 9 | 11 | 11 |
| 4 | 0 | U | 0 | 0 | 4 | 2 | 9 | 11 | 11 |

Stockholder Recommendations. In selecting nominees for directors, the Nominating and Corporate Governance Committee will review candidates recommended by stockholders in the same manner and using the same general criteria as candidates recruited by the Nominating and Corporate Governance Committee and/or recommended by our Board of Directors and our Chief Executive Officer. Any stockholder who wishes to recommend a candidate for consideration by the Nominating and Corporate Governance Committee as a nominee for director should submit such recommendations to the Nominating and Corporate Governance Committee by sending the individual's name and qualifications to our Secretary at Sage Therapeutics, Inc., 215 First Street, Cambridge, Massachusetts 02142, who will forward all recommendations to the Nominating and Corporate Governance Committee.

Stockholder Engagement. We believe that effective corporate governance includes active and regular engagement with our stockholders, and we are committed to investing time with our stockholders to increase transparency and gain a better understanding of the practices our stockholders most value. We communicate with our stockholders regularly and solicit input on our executive compensation, corporate governance and disclosure practices. In 2022 and early 2023, we have undertaken significant, proactive stockholder engagement and solicited feedback from our stockholders through open dialogue and individual outreach and communication. Our stockholder engagement team consists of members of our legal, human resources, and investor relations teams, and between mid-2022 and early 2023, we solicited feedback from stockholders representing approximately 86% of our outstanding shares based on public filings as of December 31, 2022, and engaged with stockholders then representing approximately 67% of our outstanding shares. The key topics discussed included executive compensation, board composition, diversity, and our ESG strategy. Our discussions with our stockholders have been productive and informative, and have provided a valuable opportunity to deepen our understanding of our stockholders' interests while sharing insight with our stockholders about our motivations and priorities with respect to governance and executive compensation.

Our Board of Directors, our Compensation Committee and our Nomination and Corporate Governance Committee adopted certain changes to our corporate governance practices and our executive compensation program in response to feedback we received from our stockholder engagement activities. These changes include:

| Governance-Related Feedback Received | Action(s) Taken |
|--|---|
| Increase diversity on our Board of Directors | In March 2023, we appointed another female director to the Board of Directors, further diversifying the Board of Directors' overall skillset and capabilities while also increasing gender diversity on the Board of Directors |
| Increase disclosures about our ESG initiatives | Further enhanced our disclosures on ESG-related initiatives, as more fully described in the section entitled "Environmental, Social and Governance Standards" below |
| Implement a formal director recruitment policy | In December 2022, the Board of Directors amended our Nominating and Corporate Governance Committee charter to include a requirement to instruct any search firm that it engages in a search for Board candidates to include qualified candidates with diversity of race, ethnicity or gender in the pool of candidates for every open board seat, after adopting a director recruitment policy to this effect earlier in 2022. |
| Address director commitments | We evaluated the overall commitments of each director, and as a result of such evaluation and the actions taken by members of our Board of Directors, all of our directors meet the director commitment recommendations set forth by the proxy advisory firm Institutional Shareholder Services (ISS) and all but one of our directors meet the director commitment recommendations set forth by proxy advisory firm Glass Lewis. |
| Increase portion of long-term incentive compensation granted in PSUs, with vesting based on achievement of long-term goals | Commencing in 2022, we increased the proportion of equity awards granted as PSUs from 33% to 45%, with this increase applying to our Chief Executive Officer and our other executive officers. In 2023, we further increased the proportion of equity awards granted as PSUs for |
| | our leadership team from 45% to approximately 55%, and for our Chief Executive Officer from 45% to approximately 53%, with a portion of such PSUs vesting only upon our achievement of certain TSR milestones. |
| Implement a payout cap for corporate bonuses | Instituted a maximum payout cap of 200% of the bonus target for purposes of Annual Bonus Incentive Plan payouts, commencing with 2022 compensation |

Stockholder Communications. The Board of Directors provides to every stockholder the ability to communicate with the Board of Directors, as a whole, and with committees of the Board of Directors or individual directors on the Board of Directors through an established process for stockholder communication. For a stockholder communication directed to the Board of Directors as a whole, stockholders may send such communication to the attention of the Chair of the Board via U.S. Mail or expedited delivery service to: Sage Therapeutics, Inc., 215 First Street, Cambridge, Massachusetts 02142, Attention: Chair of the Board of the Directors. All such communications will be delivered to the Board of Directors. For a stockholder communication directed to a committee of the Board of Directors or to an individual director in his or her capacity as a member of the Board of Directors, stockholders may send such communication to the attention of the individual director via U.S. Mail or expedited delivery service to: Sage Therapeutics, Inc., 215 First Street, Cambridge, Massachusetts 02142, Attention: [Name of Individual Director]. We will forward any such stockholder communication to the applicable committee chair or individual director, and the Chair of the Board in his or her capacity as a representative of the Board of Directors, to whom such stockholder communication is addressed to the address specified by each such director and the Chair of the Board, unless there are safety or security concerns that mitigate against further transmission.

Risk Oversight. Our Board of Directors oversees the management of risks inherent in the operation of our business and the implementation of our business strategies. Our Board of Directors performs this oversight role by using several different levels of review. In connection with its reviews of our operations and corporate functions, our Board of Directors addresses the primary risks associated with those operations and corporate functions. In addition, our Board of Directors reviews the risks associated with our business strategies periodically throughout the year as part of its consideration of undertaking any such business strategies. The Board of Directors also evaluates from time to time the processes by which our exposure to risk is assessed and managed by management.

Each of the committees of our Board of Directors also oversees the management of our risk that falls within the committee's areas of responsibility. In performing this function, each committee has full access to management, as well as the ability to engage advisors. The following summarizes each committee's role in the risk oversight function:

| Committee of the Board of Directors | Risk Oversight |
|--|--|
| Audit Committee | Our Audit Committee oversees the management of risks relating to accounting and financial reporting, our independent auditors, and our Values Code. In addition, the Audit Committee assesses our financial controls, legal and compliance risks, business and operational risks, and cybersecurity risks. The Audit Committee receives periodic reports from management on such risks at its regularly scheduled meetings, evaluates actions management has taken to limit, monitor or control exposures to such risks, and provides periodic updates to the full Board of Directors. Our Audit Committee also periodically reviews and discusses the guidelines and policies that govern the process by which our risk exposure is assessed and addressed by management, and reviews all related party transactions for potential conflicts of interest on an ongoing basis. |
| Compensation Committee | Our Compensation Committee oversees the management of risks relating to the compensation of our officers and directors and reviews our processes and procedures for the consideration and determination of officer and director compensation. Among other things, the Compensation Committee considers whether compensation may lead to excessive risk-taking by management in setting compensation. Our Compensation Committee also reviews succession planning for our executive officers. |
| Nominating and Corporate Governance Committee | Our Nominating and Corporate Governance Committee oversees the management of risks related to our governance practices, including by identifying appropriate individuals to become members of our Board of Directors; developing, reviewing and recommending our corporate governance guidelines; and overseeing the regular evaluation of our Board of Directors. |
| Science and Technology Committee | Our Science and Technology Committee oversees the management of risks relating to our research and development activities and discusses, evaluates and advises our Board of Directors regarding risks related to trends and developments in science, technology, and regulation related to clinical development. |

Code of Business Conduct and Ethics. Our Values Code applies to all of our employees, consultants, officers and directors, including those officers responsible for financial reporting. The current version of our Values Code, as may be amended from time to time, is available on our website at http://investor.sagerx.com/corporate-governance. A copy of our Values Code may also be obtained, free of charge, upon a request directed to: Sage Therapeutics, Inc., 215 First Street, Cambridge, Massachusetts 02142, Attention: SVP, General Counsel. We intend to disclose any amendment or waiver of a provision of our Values Code that applies to our principal executive officer, principal financial officer, or principal accounting officer, or persons performing similar functions, by posting such information on our website (available at www.sagerx.com) and/or in our public filings with the SEC.

Corporate Governance Guidelines. Our Board of Directors has adopted corporate governance guidelines to assist and guide its members in the exercise of their responsibilities. These guidelines should be interpreted in accordance with any requirements imposed by applicable federal or state laws or regulations, Nasdaq and our Certificate of Incorporation and

Bylaws. Our corporate governance guidelines are available in the corporate governance section of our website at http://investor.sagerx.com/corporate-governance. Although these corporate governance guidelines have been approved by our Board of Directors, it is expected that these guidelines will evolve over time as customary practice and legal requirements change. In particular, guidelines that encompass legal, regulatory or exchange requirements as they currently exist will be deemed to be modified as and to the extent that such legal, regulatory or exchange requirements are modified. In addition, the guidelines may also be amended by our Board of Directors at any time as it deems appropriate.

Anti-Hedging Policy. We have not adopted a formal policy specific to hedging. However, pursuant to our Insider Trading Policy, no individual deemed to be an insider of Sage pursuant to our Insider Trading Policy may buy or sell puts, calls, other derivative securities of Sage or any derivative securities that provide the economic equivalent of ownership of any of Sage's securities or an opportunity, direct or indirect, to profit from any change in the value of Sage's securities or engage in any other hedging transaction with respect to Sage's securities, at any time.

Environmental, Social and Governance Standards

In October 2021, we formally launched our SageCitizen Social Impact Initiative, an enterprise-wide social impact effort that activates and amplifies Sage's long-standing commitment to:

• **People** – Our vision is to fearlessly lead the way to create a world with better brain health, with a mission to pioneer solutions to deliver life-changing brain health medicines, so every person can thrive. As we work towards our vision and mission, we are committed to providing employees a meaningful career journey and an inclusive culture where they can do their best work while channeling their passion for helping others with opportunities to make a difference and improve lives. We celebrate people for who they are through a culture of respect and belonging that welcomes fresh thinking and unique perspectives. In part as a result of our diversity, equity and inclusion, or DE&I, efforts, as of December 31, 2022, 63% of our full-time employees identified as women and 30% of our full-time employees identified as racially or ethnically diverse.

In connection with our Great Place to Work engagement survey completed in January 2023, 93% of our employees stated they would "strongly endorse" Sage to friends and family as a great place to work. In addition, 96% of our employees stated that "people here are treated fairly regardless of their sexual orientation, race, or gender"; 100% stated that "Sage is a physically safe place to work"; and 98% stated that they "feel good about the way Sage contributes to the community."

In 2022 and early 2023, we broadened our development opportunities for our employees, including 1:1 career coaching, a mentoring program for women and diverse populations, and expanded opportunities for professional development through in-person training and online learning. To support a culture of appreciation, in 2022 we expanded our employee recognition program, SageAppreciation, with a digital platform to facilitate and share memorable, meaningful and personalized appreciation moments for Sage employees while connecting them to our mission, accomplishments and each other. Further, we believe success is measured by what employees accomplish, not where they accomplish it. Therefore, in 2022, we fully implemented our *SageFlex* model, formally allowing all employees to work from where they choose, whether that be remote, in our office space, or a combination of each. Our offices are meant to be a magnet, not a mandate, where employees can gather to collaborate, connect and build relationships when they wish.

We believe that successful execution of our strategy is dependent on attracting, retaining and motivating a diverse team of highly skilled employees at all levels. We offer our employees a comprehensive total rewards package that focuses on our employees' financial, physical and mental wellbeing. For example, we seek to provide employees with competitive compensation, including a market-competitive salary reviewed annually, cash incentives, equity awards, matching contributions to a 401(k) retirement plan, life insurance, and the opportunity to participate in the 2014 ESPP. Our annual cash incentive bonus opportunity is tied to both company performance and individual performance to foster a pay-for-performance culture. In addition, we strive to promote our employees' wellbeing through various activities, including wellness weeks and access to

counseling through our employee assistance program. We strive to offer a highly competitive benefits package that includes medical, dental, vision and flexible

spending accounts, and short- and long-term disability coverages. In 2023, we expanded our employee-centric, benefits choice approach by offering a new wellbeing reimbursement account that provides employees the opportunity to choose the benefits that best support their wellbeing and needs depending on where they are in their life journey. We regularly benchmark our rewards against our industry peers to help us remain competitive. Our voluntary turnover rate in 2022 was approximately 7.6%, compared to a median overall turnover rate of 16.1% for the life sciences, biotechnology and pharmaceutical industries reported in a 2022 Aon/Radford study.

- Patients We believe collaborating with and learning from diverse patient organizations is core to our mission. These groups serve a vital role as independent patient champions and agents of change in pursuit of shared goals: reducing stigma, improving patient care, and enhancing access to medicines and services for people impacted by brain health disorders. The voices of people living with, suffering from, and caring for those with the diseases our products or product candidates treat, or aim to treat, are integral to our decision-making across Sage. We consistently seek input and learn from these individuals through multiple appropriate forums, including regular insights gathering sessions, summits and workshops, internal speaking opportunities, and encouraging employee community engagement through disease awareness activities, such as the Walk to End Alzheimer's and the National Alliance on Mental Illness (NAMI) walk. In addition, we are deeply committed to learning from patients with diverse backgrounds and have been increasing work on our clinical trial diversity.
- **Planet** Recognizing that no one company can solve the planet's problems alone, we are committed to doing our part to reduce our carbon footprint and make the earth a healthier place to live. With approximately 109,000 square feet of office space globally and no laboratory or manufacturing space, we maintain a small ecological footprint, which we reduced by nearly 16,000 square feet in 2021. To reduce pollution and limit traffic congestion, we provide green transportation incentives to our employees, which encourage the use of non-automobile-based transportation. We believe the *SageFlex* model, which allows all employees to work remotely, also helps limit emissions. Our corporate offices participate in composting and recycling programs; use compostable cutlery, dishes, and napkins; and have installed energy efficient motion sensor lighting throughout the buildings to reduce electricity use within our office areas. In 2022, as part of our SageCitizen service week, Sage volunteers also participated in a service project to remove debris from the Charles River Esplanade in Boston, Massachusetts.
- Community Sage has a long history of giving back to the community and has delivered hundreds of hours of community service. We
 engage with organizations supporting families, children and individuals who are facing hardship or social isolation. Our community
 philanthropy focus areas are essential service organizations that supplement daily necessities from food to clothing to temporary shelter for
 families facing hardship and social connection programs that increase connectivity for those separated from loved ones, letting them know
 they are not alone and that someone cares. In 2022, we expanded our SageCitizen volunteer activities, resulting in over 700 service-hours
 with our non-profit organization partners.

Diversity, Equity and Inclusion

Our mission to pioneer solutions to deliver life-changing brain health medicines so every person can thrive depends on our ability to attract, develop, engage, and retain the industry's highest quality talent across all dimensions of diversity. This understanding guides our approach to recruiting, managing and supporting our human capital resources. We are committed to taking action to integrate diversity, equity, inclusion, and equal opportunity to foster a diverse workforce, a sense of belonging, and innovative thinking. Accordingly, DE&I is an integrated philosophy across our core business that we take seriously. We have four core areas of focus:

Experience – We seek to foster a diverse and inclusive culture that enables a sense of belonging and innovative thinking. In 2022, we worked to define the core pillars of what DE&I means to Sage, launched our first DE&I

Council and formed our first business resource groups around shared interests and experiences, which include SageWomen, SageLavender for our LGBTQIA community, SageBIPOC, SageEmerge for young professionals, SageParents and SageGreen.

- **Talent** We are proactively recruiting and developing diverse, high-performing individuals and teams. In 2022, we broadened our strategies to attract diverse candidates through collaborations with multiple organizations that focus on DE&I efforts. In part as a result of these efforts, the proportion of our newly hired employees who identified as racially or ethnically diverse increased from 34% in 2021 to 36% in 2022. In addition, the proportion of our total employees who identified as racially or ethnically diverse increased from 28% as of December 31, 2021, to 30% as of December 31, 2022.
- **External** We identify and partner with local community organizations and vendors to increase diversity in the Sage ecosystem. We are actively working to diversify our commercial suppliers, and in 2022, we launched our first vendor/supplier questionnaire to better understand the diversity efforts made by the companies with whom we do business. Recognizing that becoming more conscious about our spending decisions does not just apply to our corporate spending, in February 2023, we introduced our employees to a new online platform that highlights a broad array of Black, Latinx, veteran, woman, and LGBTQIA-owned businesses, offering a variety of goods and services. We also collaborate with organizations that serve diverse populations through our community philanthropy work.
- **Patients** As part of our commitment to our patient community, we regularly work with leading patient groups to ensure diverse patient voices are represented. In 2022, we launched our first cross-functional Clinical Trial Diversity team to review data from our PPD and MDD trials and our clinical development and recruitment processes to better understand the diversity of our patient community.

Our commitment to DE&I is reflected in our employee snapshot as of year-end 2022 below:

Employee Snapshot

| Employee Data | As of December 31, 2022 |
|--|-------------------------|
| Leadership Team Members | 16 |
| Proportion of leadership team who identified as female and/or from a diverse | |
| racial or ethnic group | 50% |
| Total employees | 674 |
| Proportion of employees who identified as female | 63% |
| Proportion of employees who identified as racially or ethnically diverse | 30% |

We are committed to fostering an inclusive environment in which everyone feels valued, respected, and empowered to contribute and provided access to the resources and opportunities to do so, while making a positive difference for patients and their families.

PROPOSAL 2

RATIFICATION OF APPOINTMENT OF INDEPENDENT AUDITORS

On the recommendation of the Audit Committee, our Board of Directors has appointed PricewaterhouseCoopers LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2023. The Board of Directors recommends that stockholders vote "FOR" ratification of this appointment. If this proposal is not approved at the Annual Meeting, our Board of Directors will reconsider its appointment. Even if the appointment is ratified, the Audit Committee may, in its discretion, direct the appointment of a different independent registered public accounting firm at any time during the year if the Audit Committee determines that such a change would be in our stockholders' best interests.

PricewaterhouseCoopers LLP has audited our financial statements for each fiscal year since December 31, 2013. We expect representatives of PricewaterhouseCoopers LLP to be present by webcast at the Annual Meeting and available to respond to appropriate questions. They will have the opportunity to make a statement if they desire to do so.

PricewaterhouseCoopers LLP Fees

The following table sets forth fees incurred for professional audit services and other services rendered to us by PricewaterhouseCoopers LLP and its affiliates for the fiscal years ended December 31, 2022 and December 31, 2021.

Audit Fees Audit-Related Fees Tax Fees All Other Fees Total

| Fiscal 2022 (\$) | Fiscal 2021 (\$) |
|---------------------|---------------------|
| 1,032,500 | 961,500 |
| 26,000 | _ |
| 110,000 | 165,500 |
| 3,081 | 2,756 |
| 1,171,581 | 1,129,756 |

Audit Fees. Audit fees consist of fees billed for professional services performed by PricewaterhouseCoopers LLP for the audit of our annual consolidated financial statements, the review of interim condensed consolidated financial statements, and related services that are normally provided in connection with registration statements, including the registration statements for our follow-on offerings.

Audit-Related Fees. Audit-related fees consist of fees billed by PricewaterhouseCoopers LLP for assurance and related services that are reasonably related to the performance of the audit or review of our consolidated financial statements. There were no such fees incurred in 2021. In 2022, the audit-related fees were incurred for accounting consultations related to the future accounting treatment of the collaboration with Biogen MA Inc., or BIMA, and Biogen International GmbH, or Biogen International. We collectively refer to BIMA and Biogen International as Biogen.

Tax Fees. Tax fees consist of fees for tax-related services, including tax consulting and compliance performed by PricewaterhouseCoopers LLP.

All Other Fees. All other fees in 2022 and 2021 consisted of fees for software programs, including a proprietary accounting research database.

Pre-Approval of Audit and Non-Audit Services

It is the policy of our Audit Committee that all services to be provided by our independent registered public accounting firm, including audit services and permitted audit-related and non-audit services, must be approved in advance by our Audit Committee.

All PricewaterhouseCoopers LLP services and fees in the fiscal years ended December 31, 2022 and 2021 were pre-approved by the Audit Committee or its properly delegated authority.

Vote Required and Board of Directors' Recommendation

The approval of Proposal 2 requires that a majority of the votes properly cast be voted FOR this proposal. Shares that are voted "abstain" and broker non-votes will not affect the outcome of this proposal.

Our Board of Directors recommends that stockholders vote "FOR" ratification of the appointment of PricewaterhouseCoopers LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2023.

PROPOSAL 3

ADVISORY VOTE ON NAMED EXECUTIVE OFFICER COMPENSATION

Our Board of Directors is committed to excellence in governance. As part of this commitment, and as required by Section 14A(a)(1) of the Exchange Act, our Board of Directors is providing our stockholders with an opportunity to cast a non-binding, advisory vote to approve the compensation of our named executive officers.

As described below under "Executive Officer and Director Compensation—Compensation Discussion and Analysis," we have developed a compensation program that is designed to attract and retain key executives responsible for our success and motivate management to enhance long-term stockholder value. The executive compensation program is designed to reward short-term and long-term performance and to align the financial interests of executive officers with the interests of our stockholders. We believe our executive compensation program strikes an appropriate balance between the implementation of responsible, measured compensation practices and the effective provision of incentives for our named executive officers to exert their best efforts for our success.

We are asking for stockholder approval, on an advisory basis, of the compensation of our named executive officers as disclosed in this Proxy Statement, which includes the disclosures in the "Executive Officer and Director Compensation—Compensation Discussion and Analysis" section below, and the compensation tables and the narrative discussion following the compensation tables in this Proxy Statement. This vote is not intended to address any specific item of compensation, but rather the overall compensation of our named executive officers and the policies and practices described in this Proxy Statement. For the reasons discussed above, our Board of Directors unanimously recommends that our stockholders vote in favor of the following resolution:

"RESOLVED, that the Company's stockholders hereby approve, on an advisory basis, the compensation of the named executive officers, as disclosed in the Company's proxy statement for the 2023 Annual Meeting of Stockholders pursuant to the compensation disclosure rules of the Securities and Exchange Commission, including the Compensation Discussion and Analysis, Summary Compensation Table and the other compensation related tables and disclosure."

As this vote is advisory, it will not be binding upon our Board of Directors or the Compensation Committee and neither our Board of Directors nor our Compensation Committee will be required to take any action as a result of the outcome of this vote. However, our Compensation Committee will carefully consider the outcome of this vote when considering future executive compensation policies and decisions.

Vote Required and Board of Directors' Recommendation

The approval of Proposal 3 requires that a majority of the votes properly cast be voted FOR this proposal. Shares that are voted "abstain" and broker non-votes will not affect the outcome of this proposal.

Our Board of Directors recommends that stockholders vote "FOR" the advisory resolution approving our named executive officer compensation.

PROPOSAL 4

AMENDMENT TO THE 2014 EMPLOYEE STOCK PURCHASE PLAN

We are asking our stockholders to approve an increase in the number of shares of common stock authorized for issuance under our 2014 ESPP. A total of 282,000 shares of our common stock were initially authorized and reserved for issuance under the 2014 ESPP when adopted in connection with our initial public offering in 2014. The 2014 ESPP was subsequently amended with the approval of our stockholders in June 2022 to increase the number of shares authorized for issuance under the 2014 ESPP by 300,000 shares, to a total of 582,000 shares. The purpose of the 2014 ESPP is to provide our eligible employees with opportunities to purchase shares of our common stock. The 2014 ESPP is intended to constitute an "employee stock purchase plan" within the meaning of Section 423(b), or Section 423, of the Internal Revenue Code of 1986, as amended, or the Code.

Proposed Amendment

Our Board of Directors has approved, and is recommending that our stockholders approve, an amendment to the 2014 ESPP, or as amended, the Amended 2014 ESPP, that will increase the number of shares authorized for issuance under the 2014 ESPP by 500,000 shares, to a total of 1,082,000 shares. The Amended 2014 ESPP would make no other changes to the 2014 ESPP. The purpose of the Amended 2014 ESPP is to ensure that we are able to continue to provide all eligible current and new employees interested in participating in the plan with sufficient shares available for purchase in light of strong employee participation and an increase in hiring to support the growth of our operations, including to support ongoing permitted pre-launch and launch-readiness activities associated with the potential approval of zuranolone.

Why We Are Asking Our Stockholders to Approve the Amended 2014 ESPP

The 2014 ESPP provides eligible employees with the opportunity to acquire an ownership interest in our business through the purchase of shares of our common stock at a price below current market prices. We believe it is crucial for our long-term success that the interests of our employees are tied to our success as "owners" of our business. The equity incentive programs we have in place, including the 2014 ESPP, are intended to build stockholder value by helping to attract, retain and motivate talented employees. As of April 17, 2023, 224,018 shares remain available for issuance under the 2014 ESPP, which we believe will not be sufficient for the expected levels of ongoing participation in the 2014 ESPP. As reported in our Annual Report on Form 10-K for the year ended December 31, 2022, as of February 8, 2023, we employed 689 full-time employees, an increase of 218 employees since February 16, 2022. Based on management's forecasts, the 2014 ESPP will not have any shares available for the offering window beginning on July 1, 2024 without the adoption of this proposal.

The material features of the Amended 2014 ESPP are summarized below. The summary is qualified in its entirety by reference to the full text of the Amended 2014 ESPP, which is filed as Appendix A to this Proxy Statement and incorporated herein by reference.

SUMMARY OF MATERIAL FEATURES OF THE AMENDED 2014 ESPP

Description of the Plan

Administration and Amendment. The Amended 2014 ESPP may be administered by the person or persons appointed by our Board of Directors, referred to as the Administrator. The Administrator has authority at any time to: (i) adopt, alter and repeal such rules, guidelines and practices for the administration of the Amended 2014 ESPP and for its own acts and proceedings as it shall deem advisable; (ii) interpret the terms and provisions of the Amended 2014 ESPP; (iii) make all determinations it deems advisable for the administration of the Amended 2014 ESPP; (iv) decide all disputes arising in connection with the Amended 2014 ESPP; and (v) otherwise supervise the administration of the Amended 2014 ESPP. Our Board of Directors may at any time and from time to time amend the Amended 2014 ESPP in any respect, except that without the approval within 12 months of such Board of Directors' action by our stockholders, no amendment shall be made increasing the number of shares approved for the Amended 2014 ESPP or making any other change that would require stockholder approval in order for the Amended 2014 ESPP, as amended, to qualify as an "employee stock purchase plan" under Section 423(b) of the Code.

Number of Authorized Shares. If the Amended 2014 ESPP is approved, a total of 1,082,000 shares of our common stock will be reserved under the Amended 2014 ESPP, of which approximately 724,018 shares would be available for future

purchases under the Amended 2014 ESPP based on 224,018 shares remaining available for issuance as of April 17, 2023. The share reserve is subject to adjustment in the event of a subdivision of outstanding shares of our common stock, the payment of a dividend in common stock or any other change affecting our common stock.

Eligibility and Participation. All employees who have been employed by us or our designated subsidiaries since at least the first day of the month preceding the first day of the applicable offering period and whose customary employment is for more than 20 hours per week are eligible to participate in the Amended 2014 ESPP. Any employee who owns, or would own upon such purchase under the Amended 2014 ESPP, 5% or more of the voting power or value of our stock is not eligible to purchase shares under the Amended 2014 ESPP.

Offering Periods. We may make one or more offerings to our employees to purchase stock under the Amended 2014 ESPP. Unless otherwise determined by the Administrator, each offering will begin on the first business day occurring on or after each January 1st and July 1st and will end on the last business day occurring on or before the following June 30th and December 31st, respectively, each referred to as offering periods. The Administrator may designate different offering periods in its discretion but no offering shall exceed 12 months in duration or overlap with another offering.

Exercise of Purchase Rights. Each employee who is a participant in the Amended 2014 ESPP may purchase shares by authorizing payroll deductions of up to 10% of the employee's eligible compensation during an offering period. Unless the participating employee has previously withdrawn from the offering, the employee's accumulated payroll deductions will be used to purchase our common stock on the last business day of the offering period at a price equal to 85% of the fair market value of our common stock on either the first or the last day of the offering period, whichever is lower, provided that no more than 2,500 shares of our common stock or such other lesser maximum number established by the Administrator may be purchased by any one employee during each offering period. Under applicable tax rules, an employee may purchase no more than \$25,000 worth of common stock, valued at the start of the purchase period, under our Amended 2014 ESPP in any calendar year.

Withdrawal and Termination of Employment. The accumulated payroll deductions of any employee who is not a participant on the last day of an offering period will be refunded. An employee's rights under the Amended 2014 ESPP terminate upon voluntary withdrawal from the plan or when the employee ceases employment for any reason.

Termination. The Amended 2014 ESPP may be terminated at any time by our Board of Directors. Upon termination of the Amended 2014 ESPP, all amounts in the accounts of participants shall be promptly refunded.

Plan Benefits. Benefits to be received by participants under the Amended 2014 ESPP, including our executive officers, are not currently determinable because participation in the Amended 2014 ESPP is voluntary and is dependent on each employee's election to participate and determination as to the level of payroll deductions. Any benefit is also subject to the market price of our common stock at future dates. Accordingly, future purchases under the ESPP are not determinable and no new plan benefits table for the Amended 2014 ESPP is included in this proxy statement.

The following table sets forth, for each of the individuals and groups indicated, the number of shares of our common stock purchased under the 2014 ESPP as of March 31, 2023.

| Name and Position | Dollar value (\$)(1) | Number of Shares Purchased |
|---|-------------------------|-------------------------------|
| Barry E. Greene, Chief Executive Officer and President | _ | _ |
| Kimi Iguchi, Chief Financial Officer and Treasurer | 214,142 | 3,080 |
| Christopher Benecchi, Chief Business Officer | 21,572 | 629 |
| Anne Marie Cook, Senior Vice President, General Counsel | 57,692 | 1,332 |
| Laura Gault, M.D., Ph.D., Chief Medical Officer | _ | _ |
| All current executive officers as a group (6 persons) | 502,256 | 8,152 |
| All directors, not including executive officers, as a group (9 persons) | | |
| *(2) | 100,776 | 1,115 |
| All employees, including all current officers who are not executive | | |
| officers, as a group (693 persons) | 13,256,730 | 231,573 |

Ineligible to participate in the 2014 ESPP.

- (1) Based on the number of shares purchased multiplied by the closing price of our common stock on the applicable exercise date.
- (2) Shares were purchased under the 2014 ESPP by Jeffrey M. Jonas, M.D., while serving as an employee of the Company. Dr. Jonas continues to serve on the Board of Directors.

United States Federal Income Tax Consequences

The following generally summarizes the United States federal income tax consequences that will arise with respect to participation in the 2014 ESPP and with respect to the sale of common stock acquired under the plan. This summary assumes a purchase price that is equal to 85% of the fair market value of the stock on the first day of the offering period or the exercise date, whichever is less. This summary also assumes that the 2014 ESPP complies with Section 423. This summary is based on the tax laws in effect as of the date of this proxy statement. Changes to these laws could alter the tax consequences described below.

Tax Consequences to Participants. A participant in the 2014 ESPP will not have income upon enrolling in the plan or upon purchasing stock at the end of an offering period.

A participant may have both compensation income and a capital gain or loss upon the sale of stock that was acquired under the 2014 ESPP. The amount of each type of income and loss will depend on when the participant sells the stock.

If the participant sells the stock more than two years after the commencement of the offering period during which the stock was purchased and more than one year after the date that the participant purchased the stock, at a profit (the sales proceeds exceed the purchase price), then the participant will have compensation income equal to the lesser of:

- 15% of the value of the stock on the day the offering period commenced; and
- the participant's profit.

Any excess profit will be long-term capital gain. If the participant sells the stock at a loss (if sales proceeds are less than the purchase price) after satisfying these waiting periods, then the loss will be a long-term capital loss.

If the participant sells the stock prior to satisfying these waiting periods, then the participant will have engaged in a disqualifying disposition. Upon a disqualifying disposition, the participant will have compensation income equal to the value of the stock on the day the participant purchased the stock less the purchase price. The participant also will have a capital gain or loss equal to the difference between the sales proceeds and the value of the stock on the day the participant purchased the stock. This capital gain or loss will be long-term if the participant has held the stock for more than one year and otherwise will be short-term.

Tax Consequences to the Company. There will be no tax consequences to the Company except that the Company will be entitled to a deduction when a participant has compensation income upon a disqualifying disposition, subject to the limitations of Section 162(m) of the Code.

Vote Required and Board of Directors' Recommendation

The approval of Proposal 4 requires that a majority of the votes properly cast be voted FOR this proposal. If the stockholders do not approve the Amended 2014 ESPP, the amendment will not be implemented and the 2014 ESPP will remain unchanged, but we reserve the right to adopt such other compensation plans and programs as we deem appropriate and in the best interests of our business and our stockholders. Shares that are voted "abstain" and broker non-votes will not affect the outcome of this proposal.

The Board of Directors recommends that stockholders vote "FOR" the Amended 2014 ESPP.

TRANSACTION OF OTHER BUSINESS

Our Board of Directors 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 in the accompanying proxy to vote on such matters in accordance with their best judgment.

EXECUTIVE OFFICER AND DIRECTOR COMPENSATION

COMPENSATION DISCUSSION AND ANALYSIS

Executive Summary

This Compensation Discussion and Analysis discusses the principles underlying our policies and decisions with respect to the compensation of our named executive officers, and all material factors relevant to an analysis of these policies and decisions. Our named executive officers for the fiscal year ended on December 31, 2022, are:

- Barry E. Greene, our Chief Executive Officer;
- Kimi Iguchi, our Chief Financial Officer and Treasurer:
- Christopher Benecchi, our Chief Business Officer;
- Anne Marie Cook, our Senior Vice President, General Counsel; and
- Laura Gault, M.D., Ph.D., our Chief Medical Officer (effective October 31, 2022).

Significant Compensation Actions

Effective June 16, 2022, Mr. Benecchi was promoted to Chief Business Officer and assumed additional responsibilities related to business development and corporate strategy. In connection with his promotion, our Compensation Committee, following a review of 2022 Peer Group (as defined below) data, approved an increase to Mr. Benecchi's annualized base salary to \$475,000. Mr. Benecchi also received an equity award consisting of time-based stock options (9,500 shares) and PSUs (7,750 units) in connection with his promotion.

Laura Gault, M.D., Ph.D. was appointed as our Chief Medical Officer, effective October 31, 2022. Based on Dr. Gault's experience and an assessment of compensation of chief medical officers at our 2022 Peer Group and similar companies, our Compensation Committee approved an annualized base salary of \$525,000 and a new hire equity award consisting of time-based stock options (64,410 shares) and PSUs (52,545 units).

In December 2022, the Board of Directors evaluated our 2022 performance against our corporate goals and, considering Mr. Greene's recommendation regarding the level of achievement against each goal, including those associated with the filing of the NDA for zuranolone, permitted pre-launch and launch-readiness activities associated with the potential approval of zuranolone, development activities related to our other clinical programs, and efforts to expand and accelerate our pipeline while working to maintain a strong financial position, and other considerations reflecting the Company's significant accomplishments in 2022 the Board of Directors assessed the Company's total corporate goal achievement percentage at 105% for all employees, including the named executive officers.

To help further drive achievement of strategic milestone goals and in response to stockholder feedback, in 2022 our Compensation Committee and our Board of Directors implemented an increase in the proportion of performance-based equity awards to time-based equity awards in awards granted to the Chief Executive Officer and other executive officers. As a result, the proportion of total equity awards granted in the form of PSUs relative to time-based stock options increased from 33% to 45% for 2022. PSU vesting is dependent on achievement of strategic research, development, commercial, and/or financial goals set by our Board of Directors over a span of several years.

Additionally, commencing in 2023, the Compensation Committee further increased the proportion of equity awards granted as PSUs for our leadership team from 45% to approximately 55%, and for our Chief Executive Officer from 45% to approximately 53%, as a result of the approval of new PSUs which vest only upon our achievement of certain TSR milestones, which we refer to as the TSR Awards. Granted in March 2023, the TSR Awards are eligible for vesting based on achievement of specific levels of relative stock price performance as measured against the Nasdaq Biotechnology Index, or NBI, at the end of a three-year performance period beginning in January 2023 and ending in December 2025, or the TSR Performance Period. Vesting of 100% of the target number of TSR Awards requires that our stock price performance achieve a 75th percentile ranking or higher as compared to the NBI at the end of the TSR Performance Period. No TSR Awards will vest if, at the end of the TSR Performance Period, our 30-day average stock price is below \$100 per share or our stock price performance achieves less than a 60th percentile ranking as compared to the NBI. The Compensation Committee approved the TSR Awards following detailed market benchmarking to align such awards with the market practices of our 2023 Peer Group.

Stockholder Engagement and Say-on-Pay Vote Results

In evaluating our executive compensation program, our Compensation Committee considers a number of factors, including feedback we receive from our stockholders about our executive compensation program. Our Compensation Committee views stockholder feedback as an important factor in developing and improving our executive compensation program. Our stockholder outreach is a year-round effort by our management to engage with our stockholders in a continuous and meaningful way. Members of our Compensation Committee and our Nominating and Corporate Governance Committee have participated in some of these discussions.

At the 2022 annual meeting of stockholders, our annual say-on-pay proposal for our 2021 compensation program received support from 43.4% of the votes cast by our stockholders on the matter. Between mid-2022 and early 2023, we solicited feedback from stockholders representing approximately 86% of our outstanding shares based on public filings as of December 31, 2022 and engaged with stockholders then representing approximately 67% of our outstanding shares to seek input on our corporate governance and compensation matters.

Our Compensation Committee and management team carefully evaluated stockholder feedback related to our executive compensation program, including from the say-on-pay vote and our stockholder engagement efforts, in the context of our compensation philosophy, objectives, and peer practices. The table below contains a summary of select changes made to our executive compensation program in the past year in response to stockholder feedback.

| Compensation-Related Feedback Received | Action(s) Taken |
|---|---|
| Several investors expressed interest in the rationale with respect to our Chief Executive Officer's 2021 compensation, which included the value of his new hire equity grant, and asked that future equity awards be aligned with market practices for annual equity grants | Consistent with our standard process, we performed an analysis of our peer group and generally aligned Mr. Greene's 2022 and 2023 annual equity awards with market practice, with vesting of a portion of such equity awards dependent upon achievement of performance-based milestones in 2022 and 2023 and TSR-based milestones in 2023. |
| Investors expressed appreciation for the increase, starting in 2022, to the proportion of long-term incentive compensation granted in PSUs, with vesting based on achievement of long-term goals | We increased the proportion of equity awards granted as PSUs from 33% to 45%, with this increase applying to our Chief Executive Officer and our other executive officers, commencing with 2022 compensation. We also view our time-based stock options granted to our executive officers as a key mechanism to further align executive officer interests with those of our stockholders, by creating an incentive to maximize long-term stock price appreciation and encouraging our executive officers to continue their service at Sage. |
| Investors encouraged us to consider vesting measures tied to TSR for our equity awards | In 2023, we further increased the proportion of equity awards granted as PSUs for our leadership team from 45% to approximately 55%, and for our Chief Executive Officer from 45% to approximately 53%, with the addition of PSU awards vesting only upon our achievement of certain TSR milestones. |
| Investors encouraged us to consider implementing a payout cap for corporate bonuses | We instituted a maximum payout cap of 200% of the bonus target for purposes of Annual Bonus Incentive Plan payouts, commencing with 2022 compensation. |

Corporate Background and Highlights for 2022

We are a biopharmaceutical company with a mission to pioneer solutions to deliver life-changing brain health medicines, so every person can thrive. We are currently targeting diseases and disorders of the brain with three key focus areas: depression, neurology and neuropsychiatry. Our focus as a company is on brain health, and we are currently targeting two critical central nervous system, or CNS, receptor systems, GABA and NMDA. The GABA receptor family, which is recognized as the major inhibitory neurotransmitter in the CNS, mediates downstream neurologic and bodily function via activation of GABA_A receptors. The NMDA-type receptors of the glutamate receptor system are a major excitatory receptor system in the CNS. Dysfunction in these systems is implicated in a broad range of CNS disorders.

Because we have a pay-for-performance philosophy, actual compensation levels for our executive officers, including our named executive officers, are correlated to the achievement of corporate goals and individual performance. We had a number of major accomplishments in 2022, including the following, which factored into our performance assessment for the purposes of funding the Annual Bonus Incentive Plan for 2022 for all employees, including our named executive officers:

- In February 2022, we announced that the CORAL Study, a placebo-controlled Phase 3 clinical trial evaluating a two-week course of zuranolone 50 mg, when co-initiated with a newly administered open-label standard antidepressant therapy, or ADT, compared with open-label standard of care ADT co-initiated with placebo, as an acute rapid response treatment in patients with MDD, met its primary endpoint and key secondary endpoint.
- In June 2022, we announced that the SKYLARK Study, a Phase 3 placebo-controlled clinical trial evaluating a two-week course of zuranolone 50 mg in women with PPD, met its primary and all key secondary endpoints.
- In December 2022, we and our collaboration partner, Biogen, completed submission of an NDA to the FDA seeking approval of zuranolone for the treatment of both MDD and PPD, which was accepted for filing and granted priority review by the FDA in February 2023, with a Prescription Drug User Fee Act, as amended, or PDUFA, target action date of August 5, 2023.
- We achieved multiple development milestones in 2022 in our SAGE-718 program, including the following:

Huntington's Disease

- In February 2022, dosing commenced in the DIMENSION Study, a double-blind placebo-controlled Phase 2 clinical trial
 of SAGE-718 in patients with Huntington's disease cognitive impairment. The DIMENSION Study is designed to
 evaluate the efficacy of once-daily dosed SAGE-718 over three months.
- In March 2022, we initiated the SURVEYOR Study, a placebo-controlled Phase 2 clinical trial of SAGE-718 in patients with Huntington's disease cognitive impairment, with a healthy volunteer component, with the goal of generating evidence linking efficacy signals on cognitive performance to domains of real-world functioning.
- o In December 2022, we initiated the PURVIEW Study, a Phase 3 open-label study to evaluate the long-term safety and tolerability of SAGE-718 in patients with Huntington's disease cognitive impairment.

Parkinson's Disease

- o In March 2022, we initiated a double-blind, placebo-controlled Phase 2 clinical trial of SAGE-718 in patients with mild cognitive impairment due to Parkinson's disease, known as the PRECEDENT Study. The PRECEDENT Study is designed to evaluate the safety and efficacy of SAGE-718 in patients with mild cognitive impairment due to Parkinson's disease over 42 days, followed by a controlled follow-up period.
- In October 2022, we presented additional results from the 28-day cohort, or Cohort B, of a Phase 2a open-label clinical trial of SAGE-718 evaluating patients with mild cognitive impairment due to Parkinson's disease, known as the PARADIGM Study. In Cohort B of the clinical trial, seven patients aged 50 to 75 years with mild cognitive impairment due to Parkinson's disease received

3 mg of SAGE-718 daily for 28 days. Patients showed performance improvements from baseline on multiple tests in the cognitive domain of executive function during the 28 days of treatment, as well as during the 14 day follow-up period. SAGE-718 was generally well-tolerated in the study; there were no serious adverse events reported, and no treatment-emergent adverse events were determined to be related to SAGE-718 or resulted in study drug discontinuation or withdrawal from the study. As expected, given its profile, SAGE-718 demonstrated neutral results in certain tests of attention and psychomotor speed.

Alzheimer's Disease

- In December 2022, we initiated the LIGHTWAVE Study, a randomized placebo-controlled Phase 2 clinical trial of SAGE-718 in patients with mild cognitive impairment and mild dementia due to Alzheimer's disease.
- In May 2022, we initiated an open-label Phase 2 clinical trial designed to evaluate the long-term safety and tolerability of SAGE-324 in patients with essential tremor, with incidence of treatment-emergent adverse events as the primary endpoint.
- We ended 2022 with cash, cash equivalents and marketable securities of \$1.3 billion.

Compensation Philosophy and Objectives

Our Compensation Committee believes that a well-designed compensation program should align executive interests with the drivers of growth and stockholder return, including by supporting our achievement of our primary business goals and our ability to attract and retain employees whose talents, expertise, leadership, and contributions are expected to build and sustain growth in long-term stockholder value. As a result, we maintain a strong pay-for-performance orientation in our compensation program by making a significant portion of total compensation variable and dependent on performance against goals, by differentiating awards based on individual performance, and, beginning in March 2023, by tying the vesting of certain PSU awards made to our leadership team to specified TSR milestones, all of which are intended to align our compensation program with stockholder interests.

To achieve these objectives, our Compensation Committee regularly reviews our compensation policies and overall program design to ensure that they are aligned with the interests of our stockholders and our business goals, and that the total compensation paid to our employees and directors is fair, reasonable and competitive for our size and stage of development. Specifically, for our executive officers, our Compensation Committee targets base salaries within a market-competitive range for our peer group and targets annual cash bonuses and annual long-term equity incentive awards around the market median for our peer group, with variability in actual payments based on corporate and individual performance.

Key Performance Factors in Determining Executive Compensation

The biopharmaceutical industry is characterized by a very long product development cycle, including a lengthy research and development period and a rigorous regulatory approval process, including the requirements for multiple phases of human testing and the need to meet a significant number of other government requirements. While we launched our first product and became a commercial-stage company in 2019, we currently are heavily focused on obtaining regulatory approval for, and the potential commercialization of, our most advanced product candidate, zuranolone, for which we have filed an NDA with the FDA seeking approval for the treatment of MDD and PPD, and on the development of our clinical pipeline. Accordingly, our Compensation Committee believes that the following performance factors may best support our future growth:

- efforts to gain regulatory approval of zuranolone for the treatment of PPD and MDD in the U.S., and our progress in conducting
 pre-launch and launch-readiness activities associated with the potential approval of zuranolone;
- initiation and progress of clinical trials for our product candidates, particularly late-stage programs;
- key research and development achievements;
- achievement of regulatory milestones for product candidates beyond zuranolone, including filing applications for product approvals and obtaining regulatory approvals;

- revenue results given the stage of launch, as well as other key metrics, including number of patients treated, and progress on pricing and reimbursement efforts;
- new business initiatives, including business development and financings;
- our progress in building out key functions and capabilities to support our next stage of growth, including commercial launch readiness and patient and physician education initiatives, and managing our growth while maintaining a high-performing, high-integrity organization and culture;
- our ability to obtain and maintain protection of key intellectual property rights; and
- financial and operating performance.

Executive Compensation Elements

Key elements of our compensation programs include the following:

| Compensation Element | Description | Strategic Role |
|---|--|--|
| Base Salary | Fixed cash compensation. Targeted within the market-competitive range, taking into consideration each named executive officer's individual performance, skills, and experience. | Attracts and rewards high-performing executives through market competitive pay and reflects individual performance over time. |
| Short-Term Annual Performance – Based Cash Incentives – Variable Pay | Annual Bonus Incentive Plan funding based on an assessment of overall corporate performance against annually pre-determined corporate goals. Individual performance is then assessed to determine individual bonus payout. | Helps drive company-wide and individual performance. Rewards annual performance. Motivates executives to achieve performance objectives that are key to our annual operating and strategic plans. |
| Long-Term Equity Incentives – Variable Pay | Annual equity awards are a mix of stock options with multi-year time-based vesting and PSUs that vest upon achievement of major clinical development, regulatory, commercial and/or TSR milestones. Any realizable value earned from our equity awards is from stock appreciation and achievement of corporate and strategic milestone goals. | Motivates executives to achieve multi- year strategic objectives and major milestones. Focuses on sustained long-term growth. Aligns executive interests and stockholder interests. Enhances retention of key leadership personnel. |

Other Compensation Practices

In addition to our compensation elements, the following compensation program features are designed to align our executive team's interests with stockholder interests and market best practices:

What We Do

We utilize a pay-for-performance compensation philosophy, with total compensation levels for our executive officers, including our named executive officers, correlated to the achievement of corporate goals and individual performance

Our Compensation Committee engages its own independent, external compensation consultant to assist the committee in its review of executive and director compensation practices

We proactively engage with our stockholders throughout the year

We have a clawback policy, which permits us to recover performancebased cash and equity compensation paid to our current or former executive officers in certain cases

We require our executive officers and directors to hold shares of our common stock in order to help align their long-term interests with those of our stockholders; see "—Executive Officer Stock Ownership Guidelines"

We have double-trigger (versus single trigger) vesting of outstanding equity awards following covered transactions under our employment arrangements with our executive officers

What We Don't Do

We do not offer any tax gross-up payments to our executive team for any change-of-control payments

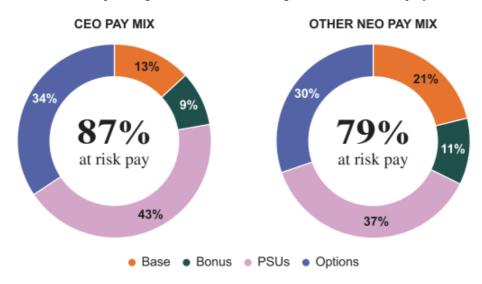
We do not permit our executive officers to hedge our securities pursuant to our Insider Trading Policy

We do not permit our insiders, including our executive team, to pledge our securities or purchase our securities on margin

We do not offer our executive team any substantially enhanced benefits or perquisites when compared with our overall employee population

Target Pay

Our Compensation Committee exercises its judgment to determine what it believes to be the appropriate level and mix of the various compensation components, after a rigorous process of reviewing benchmark information provided by the Compensation Committee's compensation consultant and other relevant data on market practices. We strive to provide our executive officers with a balance of short-term and long-term incentives to encourage and reward consistently strong performance. Approximately 87% of our 2022 compensation for our Chief Executive Officer and approximately 79% of our 2022 compensation for our other executive officers, including our other named executive officers, was variable, at risk and based on performance. Ultimately, the objective in setting the balance between long-term and short-term compensation is to ensure adequate base and short-term incentive compensation to attract and retain talent, while providing incentives to maximize long-term value for the Company and our stockholders.



Roles and Executive Compensation Process

Role of our Compensation Committee – Our Compensation Committee is responsible for, among other things, reviewing and approving, or recommending for approval by our Board of Directors, the compensation of our executive officers and certain other members of our leadership team, including salary, bonus and incentive compensation levels, equity compensation (including awards to induce employment), severance arrangements, change-in-control benefits and other forms of executive officer compensation. A full description of the Compensation Committee's role and responsibilities is in the Compensation Committee's written charter, which was adopted by the Board of Directors and is available on our website at http://investor.sagerx.com/corporate-governance.

Goalsetting and Performance Assessment – Annual corporate goals and strategic milestone goals used as PSU vesting triggers are proposed by our leadership team in December or in the first quarter of each year, reviewed by our Compensation Committee, and approved by our Board of Directors. In December or in the first quarter of the following year, our Compensation Committee, with the input of the leadership team, evaluates our annual corporate performance against the prior year's corporate goals, and taking into account other factors relevant to corporate performance, assigns an annual corporate performance rating which is then assessed and approved by the full Board of Directors. Our strategic milestone goals used as PSU vesting triggers are set by our Board of Directors and assessed on an ongoing basis.

Decision Process – During the first quarter of each year, our Compensation Committee typically determines the compensation for such year for each of the executive officers other than our Chief Executive Officer and submits a compensation recommendation to our Board of Directors for our Chief Executive Officer. Our Board of Directors then determines the compensation for such year for our Chief Executive Officer. The compensation determination for our Chief Executive Officer and our other executive officers, including the amount of any annual equity awards, the amount of any cash incentive payments, and any changes in base salary, are in each case based on the prior year's overall corporate performance against the established corporate goals, as well as each individual executive officer's

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contributions to the achievement of the corporate goals and individual performance. Bonuses paid under our Annual Bonus Incentive Plan are typically paid in the first quarter of the calendar year. Our Compensation Committee may also periodically review the compensation of our executive officers throughout the course of the year.

Role of Management – As a part of determining named executive officer performance and compensation, the Compensation Committee receives recommendations from our Chief Executive Officer (except with respect to the Chief Executive Officer's own compensation and performance). Our Chief Executive Officer's performance and compensation is approved by our Board of Directors based upon the recommendation of the Compensation Committee. The evaluation of each of our named executive officers is based on our overall corporate performance against annual goals that are approved by our Board of Directors at the beginning of each year, in addition to a review of individual performance.

Role of the Compensation Committee's Independent Compensation Consultant – For 2022, our Compensation Committee engaged Alpine Rewards, or Alpine, as its independent compensation consultant to advise on executive compensation matters including overall compensation program design, peer group development and updates, and collecting market data to inform our compensation programs for our executives and members of our Board of Directors. Alpine advises the Compensation Committee on all of the principal aspects of executive compensation, including executive new hire compensation arrangements. Alpine consultants attend meetings of the Compensation Committee when requested to do so. Alpine reports directly to our Compensation Committee and not to management, although it meets with management for purposes of gathering information for its analyses and recommendations. Our Compensation Committee has assessed the independence of Alpine consistent with Nasdaq listing standards and has concluded that the engagement of Alpine does not raise any conflict of interest.

Defining and Comparing Compensation to Market Benchmarks

In evaluating the total compensation of our named executive officers, our Compensation Committee reviews publicly available compensation data and survey data provided by our compensation consultant from a peer group. Our Compensation Committee considered companies with the following criteria when establishing our peer group for 2022 compensation decisions:

- Sector U.S. public biotechnology/pharmaceutical companies
- Stage of Development focus on early commercial companies
- *Market Capitalization* $\sim 1/3x$ to 3x our market capitalization
- **Revenue** companies with under \$500 million in revenue
- **Research & Development** research and development expenses >\$100 million

In addition to a peer group determined using the above criteria, our Compensation Committee also considered companies which list Sage as a peer in their compensation disclosures. The Compensation Committee also uses competitive compensation data from the annual total compensation study of peer companies to inform its decisions about overall compensation opportunities and specific compensation elements.

In determining the 2022 compensation for our named executive officers, our Compensation Committee relied on the following peer group, prepared by our previous independent compensation advisor, Aon, and approved by the Compensation Committee in September 2021, which we call our 2022 Peer Group:

ACADIA Pharmaceuticals Inc. Acceleron Pharma, Inc. Agios Pharmaceuticals, Inc. Alector, Inc. Biohaven Pharmaceuticals Inc. bluebird bio, Inc. Blueprint Medicines Corporation Deciphera Pharmaceuticals, Inc. Epizyme, Inc.

Exelixis, Inc.
FibroGen, Inc.
Global Blood Therapeutics, Inc.
Harmony Biosciences Holdings, Inc.
Insmed, Inc.
Intra-Cellular Therapies, Inc.
Nektar Therapeutics
Ultragenyx Pharmaceutical Inc.

Changes as compared to the peer group approved for 2021 included removal of Alnylam Pharmaceuticals, Inc., Intercept Pharmaceuticals, Inc., Ionis Pharmaceuticals, Inc., Neurocrine Biosciences, Inc. and Sarepta Therapeutics, Inc., each of which exceeded our market capitalization or revenue criteria. Two additional companies meeting our criteria, Alector, Inc. and Harmony Biosciences Holdings, Inc., were added to our 2022 Peer Group, for a total of seventeen companies, which the Compensation Committee believed provides a meaningful sample for quality benchmarking.

At the time the 2022 Peer Group was approved, the 30-day average market capitalization of each organization was approximately \$2.729 billion, median revenue was \$171 million and median research and development expense was \$296 million. We believe that the compensation practices of our 2022 Peer Group provided us with appropriate compensation reference points for evaluating the compensation of our named executive officers during 2022. The Compensation Committee also considers other reference points and criteria, including market factors and competition for executive talent, when establishing targeted compensation levels, such as the executive's experience level, contributions in helping to achieve our goals, individual performance against the executive's individual goals where applicable, scope of responsibility, skill sets, and leadership potential, as well as our critical needs and succession planning.

Our Compensation Committee reviews the companies in our peer group annually and makes adjustments as necessary to ensure the peer group continues to properly reflect the market in which we compete for talented executives and to ensure the companies in the peer group remain appropriate. For purposes of executive compensation for 2023, our Compensation Committee, with the advice of Alpine, recommended no change to our peer group criteria and examined our 2022 Peer Group in light of our stage of growth as a commercial company, the stage of development of our clinical programs and changes in our market capitalization, among other considerations. With reference to these and other key business metrics, companies whose market capitalization no longer met our criteria and/or whose stage of development was no longer comparable to our stage of development were removed and new companies were added to our peer group that better aligned with our stage of development and market capitalization. Bluebird bio, Inc. and Nektar Therapeutics were removed from our peer group due to their market capitalization not meeting our criteria. Acceleron Pharma, Inc., Biohaven Pharmaceuticals Inc., Epizyme, Inc., and Global Blood Therapeutics, Inc. were each acquired and therefore also removed from our peer group. To replace the companies that were removed, six biopharmaceutical companies that met our peer group criteria—Amicus Therapeutics, Inc., Apellis Pharmaceuticals, Inc., CRISPR Therapeutics, Halozyme Therapeutics, Inc., Mirati Therapeutics, Inc., and Sorrento Therapeutics, Inc.—were added. In September 2022, our Compensation Committee approved the revised peer group, which we refer to as our 2023 Peer Group, consisting of the following companies:

ACADIA Pharmaceuticals Inc. Agios Pharmaceuticals, Inc. Alector, Inc. Amicus Therapeutics, Inc. Apellis Pharmaceuticals, Inc. Blueprint Medicines Corporation CRISPR Therapeutics Deciphera Pharmaceuticals, Inc. Exelixis, Inc. FibroGen, Inc.
Halozyme Therapeutics, Inc.
Harmony Biosciences Holdings, Inc.
Insmed, Inc.
Intra-Cellular Therapies, Inc.
Mirati Therapeutics, Inc.
Sorrento Therapeutics, Inc.
Ultragenyx Pharmaceutical Inc.

Base Salary

Base salary is intended to provide compensation for day-to-day performance. The Compensation Committee believes that a competitive base salary is a necessary element of any compensation program that is designed to attract and retain talented and experienced executives. Base salaries for our executive officers are intended to be competitive with those received by other individuals in similar positions at the companies with which we compete for talent. Base salaries are originally established at the time the executive is hired based on individual experience, skills and expected contributions, our understanding of what executives in similar positions at peer companies are paid, and negotiations during the hiring process. The base salaries of our executive officers are reviewed annually and may be adjusted to reflect market conditions and our executives' performance during the prior year as well as our financial position, or if there is a change in the scope of the officer's responsibilities.

At the beginning of 2022, our Compensation Committee approved increases in base salary for each of our then-serving named executive officers, based upon the named executive officer's individual performance and the comparison of his or her base salary to the base salaries of executive officers in comparable positions in our 2022 Peer Group. Each salary adjustment was retroactive to January 1, 2022. The table below sets forth the adjustments made in 2022 to the 2021 base salary, in dollars and as a percentage, for each of our named executive officers other than Dr. Gault, who joined the Company in October 2022:

| Name | 2021 Base Salary (\$) | 2022 Base Salary (\$) | Increase (%) |
|-----------------------------|--------------------------|--------------------------|-----------------|
| Barry E. Greene | 735,000 | 760,725 | 3.5% |
| Kimi Iguchi | 443,049 | 458,556 | 3.5% |
| Christopher Benecchi(1) | 440,000 | 444,642 | 8.0% |
| Anne Marie Cook | 459,083 | 475,151 | 3.5% |
| Laura Gault, M.D., Ph.D.(2) | _ | 525,000 | _ |

- (1) Effective June 16, 2022, Mr. Benecchi was promoted to Chief Business Officer, and in connection with this promotion, our Compensation Committee, following a review of 2022 Peer Group data, approved an increase to Mr. Benecchi's annualized base salary from \$444,642 to \$475,000.
- (2) Dr. Gault was appointed as our Chief Medical Officer in October 2022 and did not receive any compensation from us prior to her appointment. Based on Dr. Gault's experience and an assessment of base salaries of chief medical officers at our 2022 Peer Group and similar companies, her annualized base salary for 2022 was set at \$525,000.

Short-Term Incentives - Performance-Based Annual Bonus Incentive Plan

The Compensation Committee reviews the competitiveness of our Annual Bonus Incentive Plan targets annually. No changes were made to incentive targets for executive officers in 2022.

Short-Term Incentives - Performance-Based Annual Bonus Incentive Plan Corporate Goals Assessment

In making its determination regarding bonuses based on performance in 2022 under our annual cash incentive program, our Compensation Committee considered our success against our 2022 corporate goals and other considerations reflecting the Company's significant accomplishments in 2022. The 2022 corporate goals and the weight attributable to each goal were approved by our Board of Directors in the first quarter of 2022. In December 2022, the Board of Directors evaluated our 2022 performance against our corporate goals and, considered Mr. Greene's recommendation regarding the level of achievement against each goal, including those associated with submission of the NDA for zuranolone, permitted pre-launch and launch-readiness activities associated with the potential approval of zuranolone, development activities related to our other clinical programs and efforts to expand and accelerate our pipeline, and other factors to be considered to recognize the Company's significant accomplishments in 2022. The Board of Directors assessed the Company's total corporate goal achievement percentage at 105% for all employees, including the named executive officers. A summary of the corporate goals, relative weightings, level of achievement is set forth in the table below:

| 2022 Corporate Goals | Weight | Actual Performance |
|---|--------|-----------------------|
| NDA and Inspection Readiness | 25% | Partially Achieved* |
| •Achieve NDA filing acceptance for zuranolone in MDD. | | v |
| •Achieve inspection readiness for zuranolone in MDD and PPD. | | |
| * The Board of Directors determined this goal was partially achieved because the positive results of the | | |
| SKYLARK Study allowed us to consolidate our NDA submission to include both MDD and PPD ahead | | |
| of schedule. | | |
| Commercialization | 20% | Exceeded |
| •Leverage ZULRESSO to enhance PPD market capabilities. | | |
| •Prepare for potential U.S. launch of zuranolone in 2023, if approved, including permitted pre-launch | | |
| activities, efforts focused on disease state education, scientific exchange and permitted interactions | | |
| with payers, as well as pre-launch planning and launch-readiness activities for zuranolone. | | |
| Value Creation | 20% | Achieved |
| •Maintain strong balance sheet to support the growth of our portfolio and commercialization efforts. | | |
| Portfolio | 20% | Achieved |
| •Expand and accelerate our early- and mid-stage research and development pipeline. | | |
| People | 15% | Exceeded |
| •Achieve growth of our workforce to support our long-term strategic objectives, while continuing to | | |
| reflect our culture of integrity, patient safety, quality and compliance in the design and execution of our | | |
| activities. | | |
| Total Company | 100% | |
| Final Corporate Performance Level | | 105% |

Calculation of Annual Cash Incentives

Our Compensation Committee establishes the annual performance-based cash bonus opportunity for each member of our leadership team other than our Chief Executive Officer, representing a percentage of each individual's base salary. In February 2023, the Compensation Committee assessed the individual performance of each of our named executive officers other than Mr. Greene, whose bonus as Chief Executive Officer was determined solely on the basis of the corporate performance level, and therefore received a bonus equal to 105% of his target bonus for 2022. The bonuses paid to our named executive officers excluding Mr. Greene were a function of both the corporate performance level and individual performance relative to our corporate goals.

When assessing the individual performance of the named executive officers other than Mr. Greene, the Compensation Committee considered the following contributions to our corporate goals:

Ms. Iguchi. Under Ms. Iguchi's leadership in 2022, we delivered a robust long-range plan and analysis that provided visibility on key financial metrics, risks and opportunities, and enabled enhanced forecasting and contingency planning. These enhancements supported our management and program teams in key strategic decisions, including with respect to our financing and commercialization strategies and efficient management of operating expenses. Throughout 2022, Ms. Iguchi also executed multiple initiatives to improve reporting and operational efficiency and implemented cost-effective measures, such as office design and space changes which contributed to an increase in space utilization at our offices. In addition, Ms. Iguchi executed strategic investor relations initiative and engagement, including the hosting of our first-ever joint investor event with Biogen Inc., focused on the potential commercialization of zuranolone. Ms. Iguchi successfully assisted management with the communication of complex, high-visibility milestones in 2022, including topline readouts for our CORAL Study and SKYLARK Study, and our NDA filing strategy for zuranolone.

Mr. Benecchi. Under Mr. Benecchi's leadership in 2022, we developed and implemented zuranolone launch readiness planning by way of a crossfunctional team with regular engagements, which is being utilized to help enable commercialization planning efforts with Biogen. Mr. Benecchi also provided key inputs for strategic decisions relating to our investment plans, marketing, market access, distribution strategies, branding, and forecasting efforts to assist with development of our short- and long-term business planning. Throughout 2022, Mr. Benecchi led the communications with our analysts and investors regarding several key commercial updates, regularly engaged with external stakeholders and played a key role in professional meetings to advance our mission. Mr. Benecchi also played a key role in permitted pre-launch activities related to the potential approval of zuranolone. In June 2022, Mr. Benecchi was promoted to Chief Business Officer, and assumed additional responsibilities related to business development, corporate strategy, program management, new product planning, and alliance management. In addition, Mr. Benecchi served as a member of the Joint Steering Committee in connection with our strategic collaboration with Biogen, and implemented initiatives to enhance our ongoing collaboration relationships with Biogen and Shionogi & Co., Ltd., or Shionogi. Mr. Benecchi led efforts throughout 2022 to build additional sales and marketing capabilities in the U.S., in anticipation of our potential commercial launch of zuranolone in the U.S., if it is approved.

Dr. Gault. Under Dr. Gault's leadership following her date of hire in October 2022, our team achieved significant regulatory milestones, including those associated with the filing of the NDA for zuranolone in MDD and PPD. Dr. Gault made key contributions in 2022 to the development of our program and regulatory strategies, and developed relationships with internal and external stakeholders. In addition, Dr. Gault played an instrumental role in ongoing efforts to integrate our health economics and outcomes research plans into our overall program strategy by way of coordinated interactions with program and governance teams.

Ms. Cook. Under Ms. Cook's leadership in 2022, our legal, compliance and intellectual property teams provided key pragmatic, solution-oriented guidance and solutions on a range of strategic matters, including our efforts to gain regulatory approval of zuranolone for the treatment of MDD and PPD in the U.S., conduct permitted pre-launch and launch-readiness activities in anticipation of potential approval of zuranolone, and conduct activities to support our other pipeline programs and growing business operations. In 2022, Ms. Cook led the team responsible for ongoing, comprehensive risk assessments of our business, and for implementing initiatives to improve our policies, training, data analytics, monitoring and auditing, including in connection with the potential commercialization of zuranolone, if approved. Throughout 2022, Ms. Cook provided key input and guidance on efforts to develop and improve our strategic efforts and capabilities, including with respect to our ongoing collaborations with Biogen and Shionogi, commercialization efforts, contracting strategy, onboarding and training of personnel, and research and development, while maintaining our strong culture of integrity and compliance.

In addition, in December 2022, following a review of our 2022 Peer Group and 2023 Peer Group data on incentive cash award levels for our executive officer positions, our Compensation Committee approved an additional bonus pool equal to 5% of the 2022 base salaries for our executive officers, except for Mr. Greene, to be available to help better align incentive cash award levels for 2022 performance with the market practices of our 2022 Peer Group and 2023 Peer Group. In February 2023, the Compensation Committee allocated the market adjustment pool among our executive officers, except for Mr. Greene. We refer to this adjustment as the Market Competitive Adjustment. The Market Competitive Adjustment was paid in addition to such executive officer's target cash incentive award under our Annual Bonus Incentive Plan, as part of the annual bonus payments to our executive officers.

The table below shows, for each named executive officer, such executive's target cash incentive award under the 2022 annual cash incentive program as a percentage of the named executive officer's annual base salary in 2022, the Market Competitive Adjustment approved for each named executive officer other than Mr. Greene, the target cash incentive award opportunity in dollars for 2022, our Company performance factor based on the Board of Directors' assessment of our corporate performance, each individual's performance factor based on an assessment of individual performance, and the actual cash incentive award payments to our named executive officers for 2022 performance, which were paid in February 2023. To calculate each award payment, we multiplied the applicable named executive officer's target cash incentive award opportunity (inclusive of the Market Competitive Adjustment, if applicable) by both the corporate and individual performance-level multipliers.

2022 Performance-Based Annual Cash Incentive Awards

| Name | 2022 Target Cash Incentive Award (% of 2022 Base Salary) | 2022 Target Cash Incentive Award Opportunity (\$) | 2022 Market Competitive Adjustment (\$) | 2022 Company Performance Factor (%) | 2022 Individual Performance Factor (%) | 2022 Cash Incentive Award Payment (\$)(2) |
|-----------------------------|---|---|---|--|---|---|
| Barry E. Greene | 65% | 494,471 | _ | 105% | _ | 519,195 |
| Kimi Iguchi | 40% | 183,422 | 22,928 | 105% | 90% | 195,001 |
| Christopher Benecchi | 40% | 190,000 | 23,750 | 105% | 105% | 235,659 |
| Anne Marie Cook. | 40% | 190,060 | 23,758 | 105% | 100% | 224,509 |
| Laura Gault, M.D., Ph.D.(1) | 40% | 35,671 | 4,459 | 105% | 100% | 42,137 |

- (1) Dr. Gault became our Chief Medical Officer in October 2022 and received a prorated cash incentive award based on her hire date for the fiscal year ended December 31, 2022.
- (2) Except for Mr. Greene, reflects an additional 5% of such executive officer's 2022 base salary in effect as of December 31, 2022, with Dr. Gault's base salary prorated consistent with Note 1 above. The portion of the amount reported in this column that has been characterized as non-equity incentive plan compensation is: Mr. Greene: \$519,195, Ms. Iguchi: \$173,334, Mr. Benecchi: \$209,475, Ms. Cook: \$199,563, and Dr. Gault: \$37,455, which is the portion each executive would have received absent the Market Competitive Adjustment. The total dollar amount impact of the Market Competitive Adjustment was: Mr. Greene: none, Ms. Iguchi: \$21,667, Mr. Benecchi: \$26,184, Ms. Cook: \$24,946, and Dr. Gault: \$4.682.

Long-Term Incentives - Equity Incentive Compensation

The market for qualified and talented executives in the biopharmaceutical industry is highly competitive, and we compete for talent with many companies that have greater financial resources than we do. Accordingly, we believe equity compensation is a crucial component of any competitive executive compensation package we offer. We typically grant equity awards to each of our executive officers upon commencement of employment; annually in conjunction with our review of individual performance; in connection with a promotion; or as a special incentive.

In determining the annual equity awards to grant to any of our executive officers, which includes our named executive officers, the Compensation Committee typically considers a number of factors, including: our performance against corporate goals during the preceding year, the executive officer's individual performance during the preceding year, the executive officer's ability to drive future value creation, the overall retention value of past equity awards, and competitive levels of executive compensation for similarly situated executive officers based on analysis of data from our applicable peer group. In addition, our Compensation Committee reviews all components of the executive officer's compensation to ensure that his or her total compensation is aligned with our overall philosophy and objectives.

Equity awards for our employees, including our executive officers, take the form of stock options with time-based vesting and PSUs. As a company that relies heavily on the use of stock options to align the interests of employees, including our executive officers, with the interests of stockholders, we do not believe that the Black-Scholes accounting value (calculated in accordance with Financial Accounting Standards Board Accounting Standards Codification Topic 718, "Compensation—Stock Compensation", or FASB Topic 718) should be the primary determinant of award size. We believe stock price volatility is inherent in the drug development industry, and we do not believe that employees should be rewarded with more shares due to decreases in our stock price or penalized with fewer shares due to increases in our

stock price. Therefore, we focus on percentage ownership and managing dilution, which we believe are important to our stockholders and provide greater continuity from year to year for our employees. We then validate our assessment with a review of the applicable Black-Scholes accounting values to ensure the market competitiveness of our incentive programs is evaluated holistically.

To this end, we use a unit-based approach to determine equity awards for all employees, including our executive officers, and consider the percent ownership of the Company being awarded as the primary measure for targeting competitive awards. We align the overall pool of equity to be awarded to our executive officers with the median competitive range and allow for some flexibility within that range, dependent on business needs, with sensitivity towards short-, medium- and long-term dilution. Black-Scholes accounting value (calculated in accordance with FASB Topic 718) and current realizable value of historical awards are factors also considered to help ensure appropriate stewardship of the equity plan and reasonable delivery to equity recipients. To establish specific market competitive equity guidelines for our executive officers, we apply the percent ownership of the Company being awarded, using stock options as our benchmark for measurement.

For our executive officers, including our named executive officers, we historically split the total number of shares subject to equity awards 67%/33% between time-vesting stock options and PSUs. The shares subject to PSUs only vest upon the achievement of pre-defined strategic milestone goals and are subject to the risk of forfeiture if the applicable goals are not achieved. Beginning in 2022, we increased our emphasis on PSUs by splitting the total number of shares subject to equity awards 55%/45% between time-vesting stock options and PSUs. This change was driven by our pay-for-performance philosophy and feedback we received from our stockholders.

All PSUs that were granted to our named executive officers in 2022 vest upon the achievement of strategic regulatory and commercial milestones approved by our Board of Directors. We believe these milestones, summarized as follows, are aligned with potential value creation for our stockholders over a span of one to five years:

| 2022 PSU Milestones(1) | % Weighting to Vest(2) |
|---|---------------------------|
| FDA acceptance for filing of next NDA (i.e., next product candidate | |
| after ZULRESSO or zuranolone) | 35% |
| Successful launch of zuranolone with a specified number of patients | |
| treated in approved indications | 35% |
| Positive Phase 2 data readout for SAGE-718 in a placebo-controlled | |
| study | 30% |

- (1) Used for all PSUs granted to our executive officers in 2022.
- (2) The PSUs associated with each milestone will vest at the time the milestone is achieved.

In 2022, the performance milestone from the 2019 annual PSU award tied to cumulative product revenue of \$500 million by the end of 2022 was not achieved and the corresponding awards expired without vesting. No PSU awards vested during 2022.

All stock options granted to our executive officers have exercise prices equal to the fair market value of our common stock on the date of grant, so that the recipient will not earn any compensation from his or her options until they are vested and unless our share price increases above the share price on the date of grant. Stock options granted to our executive officers have time-based vesting, typically vesting as to 25% of the shares on the first anniversary of their hire date or date of grant and then in equal monthly installments thereafter until the fourth anniversary of such date subject to the executive officer's continued employment through each such date, which we believe provides an incentive to our executives to add value to the Company over the long-term and to remain with Sage. Vesting of option and PSU grants to employees ceases upon termination of employment, and option exercise rights typically cease three months following termination of employment, except in the case of death or disability or where the Compensation Committee or the Board of Directors has exercised its authority to extend the relevant option exercise time period. Prior to the exercise of an option and the vesting and settlement of PSUs, the grantee does not have any rights as a stockholder with respect to the applicable shares underlying the equity awards, including voting rights and the right to receive dividends or dividend equivalents.

All equity awards to our named executive officers are approved by our Compensation Committee, other than equity awards to our Chief Executive Officer, which are approved by the Board of Directors upon a recommendation by the

Compensation Committee. Annual equity awards to our named executive officers other than our Chief Executive Officer are typically granted at one of the first few regularly scheduled meetings of the Compensation Committee of the calendar year. Equity awards vary in size among our executive officers. Dr. Gault was hired in October 2022 and received a new hire equity award consisting of time-based stock options (64,410 shares) and performance-based PSUs (52,545 units). In addition, Mr. Benecchi was promoted to Chief Business Officer in June 2022 and received an equity award consisting of time-based stock options (9,500 shares) and performance-based PSUs (7,750 units). All other equity awards to our named executive officers were granted as part of our annual equity program.

A summary of the 2022 annual equity awards granted to each of our named executive officers other than Dr. Gault is shown in the table below:

| Name | Stock Options (#) | Performance Restricted Stock Units (PSUs) (#) | Stock Options (\$)(1) | Performance Restricted Stock Units (PSUs) (\$)(1) | Stock Options (%)(2) | Performance Restricted Stock Units (PSUs) (%)(2) |
|----------------------|----------------------|--|--------------------------|--|----------------------------|---|
| Barry Greene | 69,920 | 57,040 | 1,958,007 | 2,455,002 | 0.12 | 0.10 |
| Kimi Iguchi | 15,200 | 12,400 | 425,901 | 533,696 | 0.03 | 0.02 |
| Christopher Benecchi | 11,400 | 9,300 | 319,081 | 400,272 | 0.02 | 0.02 |
| Anne Marie Cook | 15,200 | 12,400 | 425,901 | 533,696 | 0.03 | 0.02 |

- (1) The amounts reported in the "Stock Options" and "Performance Restricted Stock Units (PSUs)" columns above do not reflect the amount of compensation actually received by the named executive officers from the stock options and PSUs during the fiscal year. The amounts reported in these columns represent the grant date fair value of the stock options and PSUs granted to the named executive officers during 2022, calculated in accordance with the provisions of FASB Topic 718, not including any estimates of forfeitures related to service-based vesting conditions. See note 9 of "Notes to Consolidated Financial Statements" in our Annual Report on Form 10-K filed with the SEC on February 16, 2023 for a discussion of assumptions made by us in determining the grant date fair value of our stock option and PSU awards. In accordance with SEC rules, these amounts are calculated based on the probable outcome of the performance conditions as of the grant date. We assume for purposes of these calculations that the performance conditions for all PSU awards will be met at target.
- (2) The calculation is the grant as a percentage of the quantity of our total shares outstanding on the grant date. The grant was made on February 11, 2022, when we had 59,053,749 shares outstanding.

Executive Officer Stock Ownership Guidelines

Because of the importance of linking the interests of management and stockholders, in 2015, our Compensation Committee established stock ownership guidelines for our executive officers. These guidelines specify the number of shares that our executive officers must accumulate and hold within five years from the later of the effective date of implementation of the guidelines or the date the individual was hired or promoted to an executive officer position. Under the guidelines, ownership targets are set at a value greater than or equal to four times base salary in the case of our Chief Executive Officer, and greater than or equal to two times base salary in the case of our other executive officers. The following forms of equity are counted as owned for purposes of the stock ownership guidelines: shares owned outright; unvested restricted stock units (whether or not performance-based); and vested but unexercised "in-the-money" stock options. We conducted our most recent periodic assessment on the basis of ownership as of June 10, 2021, and all executive officers who were required to be in compliance with our ownership guidelines by that date were in compliance. The Compensation Committee oversees compliance with the stock ownership guidelines and periodically reviews and amends the stock ownership guidelines as the Compensation Committee deems advisable.

Stock Option Granting Practices

Delegation to Our Chief Executive Officer

Currently, all of our employees, including our named executive officers, are eligible to participate in our 2014 Stock Option and Incentive Plan, or the 2014 Plan. All new employees are granted stock options when they start employment either under the 2014 Plan or under our 2016 Inducement Equity Plan, as amended and restated on September 20, 2018, or the 2016 Inducement Equity Plan, and all continuing employees are eligible for equity awards on an annual basis under the 2014 Plan based on performance and upon promotions to positions of greater responsibility. Our

Compensation Committee has delegated to our Chief Executive Officer the authority to make equity awards under our 2014 Plan within approved guidelines to new hires, to non-employee consultants, and in connection with annual grants and promotions, other than grants to leadership team members who directly report to the Chief Executive Officer, which include all executive officers. The number of stock options or other equity awards our Chief Executive Officer may grant under the 2014 Plan to any individual must be within the range set by our Compensation Committee for these awards. Our Compensation Committee has delegated to a member of the Compensation Committee the authority to make equity awards under our 2016 Inducement Equity Plan within approved guidelines to new hires, other than grants to leadership team members including executive officers.

With respect to stock option awards to new hires, the award is typically granted to the new hire on the first business day of the calendar month following the date of his or her first date of employment, whether the award is made under the 2014 Plan or the 2016 Inducement Equity Plan. Awards under the 2016 Inducement Equity Plan may only be made to individuals who were not previously an employee or non-employee director of ours (or following a bona fide period of non-employment), as an inducement material to such individual's entering into employment with us, pursuant to Rule 5635(c)(4) of the Nasdaq Listing Rules.

Employee Benefits

In addition to the primary elements of compensation described above, the named executive officers participate in the same broad-based employee benefits programs available to all of our employees, including health insurance, life and disability insurance, dental insurance and our 401(k) plan. We do not provide special benefits to our executive officers.

Compliance with IRS Code Section 162(m)

Section 162(m) of the Internal Revenue Code of 1986, as amended, or Section 162(m), generally disallows a tax deduction to public companies for compensation in excess of \$1 million paid in any one year to each of certain of the Company's current and former executive officers. Historically, compensation that qualified under Section 162(m) as performance-based compensation was exempt from the deduction limitation. However, subject to certain transition rules, tax legislation signed into law in December 2017 eliminated the performance-based compensation exception. As a result, for taxable years beginning after December 31, 2017, all compensation in excess of \$1 million paid in any one year to each of the specified officers that is not covered by the transition rules will not be deductible by us.

In designing our executive compensation program and determining the compensation of our executive officers, including our named executive officers, our Compensation Committee and our Board of Directors considers a variety of factors, including the potential impact of the Section 162(m) deduction limit. However, our Compensation Committee and our Board of Directors will not necessarily limit executive compensation to amounts that are or may be deductible under Section 162(m). The deductibility of some types of compensation depends upon the timing of vesting or exercise of previously granted rights. Our Compensation Committee will continue to monitor developments under Section 162(m). Our Compensation Committee and our Board of Directors believe that our stockholders' interests are best served if its discretion and flexibility in awarding compensation is not restricted, even though some compensation awards may result in non-deductible compensation expense.

Rule 10b5-1 Sales Plans

Our policy governing transactions in our securities by directors, officers and employees permits our directors, officers and employees to enter into trading plans complying with Rule 10b5-1 under the Exchange Act. Certain of our executive officers have adopted, and directors and other executive officers may in the future adopt, Rule 10b5-1 trading plans. Generally, under these trading plans, the individual relinquishes control over the transactions once the trading plan is put into place. Accordingly, sales under these plans may occur at any time during the term of the trading plan, including possibly before, simultaneously with, or immediately after significant events involving the Company, and at other times, including during a closed trading window, when a director, officer, or employee may otherwise be prohibited from trading. The first transaction under a 10b5-1 plan adopted on or after February 27, 2023, for directors and members of our leadership team may occur no earlier than the later of: (i) 90 days following the plan adoption or modification or (ii) two business days following the disclosure in a periodic report of our financial results for the fiscal quarter in which the plan was adopted or modified (up to a maximum of 120 days following plan adoption or modification). The first transaction under a 10b5-1 plan adopted on or after February 27, 2023, for other persons (excluding directors and members of our leadership team) may occur no earlier than 60 days following the plan adoption or modification. The directors, officers and employees who are parties to such sales plans may amend or terminate the plans in certain circumstances.

Compensation Risk Assessment

Our Compensation Committee periodically reviews and considers whether our compensation programs and policies create risks that are reasonably likely to have a material adverse effect on us. We believe that our executive compensation program does not encourage excessive or unnecessary risk-taking. This is primarily due to the fact that our compensation programs are designed to encourage our executive officers and other employees to remain focused on both short-term and long-term strategic goals. We also have a Values Code in place to prevent conduct by our executive officers and other employees that is inconsistent with applicable laws and regulations. Our Values Code serves as the foundation of our corporate governance principles. Disciplinary measures for violations of our Values Code may include a reduction or elimination of bonuses, termination of employment or restitution. We have established several controls to address and mitigate compensation-related risk, such as maintaining an anti-hedging and anti-pledging policy, stock ownership guidelines for our executives and non-employee directors, and a clawback policy to recover cash and equity incentive awards in connection with certain events, as described below. In addition, the stock option agreements that govern stock options granted to our executive officers and other employees provide that the options will terminate in the event of termination of the individual's employment "for cause." As a result, we do not believe that our compensation programs are reasonably likely to have a material adverse effect on us.

Clawback Policy

We have a clawback policy, effective as of January 2022, that is applicable to all of our current or former employees classified as part of our leadership team, which includes all of our executive officers, or the covered employees. The policy provides that:

- In the event we are required to prepare an accounting restatement and our Board of Directors determines that (1) a covered employee's acts or omissions contributed to the circumstances requiring the restatement and (2) these acts or omissions involved intentional misconduct, fraud, or an intentional violation of our Values Code or any applicable legal or regulatory requirements, then we will use reasonable efforts to recover from such covered employee up to 100% (as determined by the Board, or a committee thereof, in its sole discretion as appropriate based on the conduct involved) of the incentive-based compensation received by the covered employee from us during the three-year period preceding the accounting restatement.
- In the event our Board of Directors determines that (1) a covered employee in the course of work for us engaged in intentional misconduct, fraud, or an intentional violation of our Values Code or any applicable legal or regulatory requirements with respect to the collection, analysis or reporting of clinical trial or other scientific data which resulted in us reporting materially inaccurate data in press releases, publications or other public forums or to regulatory authorities, and (2) this activity caused serious financial, business or reputational damage to us, then in each case, we will use reasonable efforts to recover from the covered employee up to 100% (as determined by the Board, or a committee thereof, in its sole discretion as appropriate based on the conduct involved) of the incentive-based compensation received by the covered employee from the Company during the three-year period preceding the relevant activity.

Any clawback pursuant to this policy would be in addition to any other relief available to us as a result of the covered employee's misconduct. Once Nasdaq's proposed listing standards, pursuant to SEC rules and the Dodd-Frank Wall Street Reform and Consumer Protection Act, become effective, we plan to adopt a revised clawback policy consistent with the new requirements.

Compensation Committee Report

Our Compensation Committee has reviewed and discussed the "Compensation Discussion and Analysis" required by Item 402(b) of Regulation S-K with management. Based upon such review and discussions, our Compensation Committee recommended to our Board of Directors that such section be included in this Proxy Statement and incorporated by reference in our Annual Report on Form 10-K for the year ended December 31, 2022, which was filed with the SEC on February 16, 2023.

By the Compensation Committee of the Board of Directors of Sage Therapeutics, Inc.,

Michael F. Cola, Chair Elizabeth Barrett James M. Frates

Securities Authorized for Issuance Under Equity Compensation Plans

The following table sets forth information as of December 31, 2022 regarding shares of our common stock that may be issued under our equity compensation plans, consisting of the 2011 Stock Option and Grant Plan, or the 2011 Plan, the 2014 Plan, the 2014 ESPP, and our 2016 Inducement Equity Plan. Since the closing of our initial public offering, no additional equity awards have been made under our 2011 Plan. Our 2014 Plan contains an "evergreen" provision, which allows for an annual increase in the number of shares of stock available for issuance on the first day of each year. The annual increase in the number of shares is a maximum of four percent of the number of shares of our common stock issued and outstanding on the immediately preceding December 31, or such lesser number of shares determined by our Board of Directors or Compensation Committee. The 2016 Inducement Equity Plan was approved by the Board of Directors in December 2016 for use exclusively in the grant of equity awards to individuals who were not previously an employee or non-employee director of the Company (or following a bona fide period of non-employment), as an inducement material to such individual's entering into employment with the Company, pursuant to Rule 5635(c)(4) of the Nasdaq Listing Rules.

Equity Compensation Plan Information as of December 31, 2022

| Plan Category | Number of securities to be issued upon exercise of outstanding options, warrants and rights (#) | Weighted-average exercise price of outstanding options, warrants and rights (\$) | Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in first column) |
|--|---|--|---|
| Equity compensation plans approved by security holders | 8,770,114(1) | 74.19(2)(3) | 4,636,861(4) |
| Equity compensation plans not approved by | 0,770,114(1) | 74.13(2)(3) | 4,050,001(4) |
| security holders(5) | 433,717(6) | 141.72 | 2,449,754 |
| Total | 9,203,831 | 77.95 | 7,086,615 |

- (1) Consists of an aggregate of 7,354,633 shares of our common stock issuable upon the exercise of outstanding options granted under the 2011 Plan and the 2014 Plan, and 1,415,481 shares of our common stock subject to outstanding PSUs and RSUs granted under the 2014 Plan that will entitle the holder to one share of our common stock for each unit that vests.
- (2) Does not include purchase rights accruing under the 2014 Employee Stock Purchase Plan because the purchase right (and therefore the number of shares to be purchased) will not be determined until the end of the purchase period.
- (3) The calculation does not take into account the 1,415,481 shares of our common stock subject to outstanding PSUs and RSUs. Such shares will be issued at the time that the PSUs and RSUs vest, without any cash consideration payable by the grantee for those shares.
- (4) As of December 31, 2022, there were 4,336,738 shares available for grant under the 2014 Plan and 300,123 shares available for purchase under the 2014 Employee Stock Purchase Plan, of which 76,105 shares were issued on January 9, 2023, pursuant to an offering period that ended on December 31, 2022.
- (5) Consists of the 2016 Inducement Equity Plan.
- (6) Consists of an aggregate of 433,717 shares of our common stock issuable upon the exercise of outstanding options granted under the 2016 Inducement Equity Plan.

Executive Compensation

2022 Summary Compensation Table

The following table sets forth the compensation earned during the fiscal years ended December 31, 2022, December 31, 2021, and December 31, 2020 for our chief executive officer, our chief financial officer and our next three highest-paid executive officers. We refer to these officers as our named executive officers.

| Name and Principal Position | Year | Salary (\$) | Bonus (\$)(1) | Stock Awards (\$)(2) | Option Awards (\$)(2) | Non-equity incentive plan compensation (\$)(3) | All Other Compensation (\$)(4) | Total (\$) |
|---|----------------------|---------------------------------|---|---------------------------------|--|--|--------------------------------------|-------------------------------------|
| Barry E. Greene Chief Executive Officer and President | 2022 2021 2020 | 760,725 735,000 52,897(6) | ======================================= | 2,455,002 — — | 1,958,007 57,615,277(5) 771,858(7) | 519,195 501,638 — | 12,235 12,235 1,297 | 5,705,164 58,864,150 826,052 |
| Kimi Iguchi Chief Financial Officer and Treasurer | 2022 2021 2020 | 458,556 443,049 428,067 | 21,667 — — | 533,696 781,565 265,388 | 425,901 1,021,180 1,058,096 | 173,334 167,473 206,756 | 11,813 10,651 10,439 | 1,624,967 2,423,918 1,968,746 |
| Christopher Benecchi (8) Chief Business Officer | 2022 2021 | 461,086 133,334 | 26,184 200,000(9) | 643,312 1,019,025 | 518,633 1,324,058 | 209,475 55,699 | 7,014 314 | 1,865,704 2,732,430 |
| Anne Marie Cook Senior Vice President, General Counsel | 2022 2021 2020 | 475,151 459,083 443,558 | 24,946 — — | 533,696 781,565 1,173,476 | 425,901 1,021,026 303,300 | 199,563 192,815 214,239 | 11,940 11,817 10,357 | 1,671,197 2,466,306 2,144,930 |
| Laura Gault, M.D., Ph.D. (10). Chief Medical Officer | 2022 | 89,489 | 204,682 | 1,990,405 | 1,643,308 | 37,455 | 2,456 | 3,967,795 |

- (1) The 2022 amounts for Ms. Iguchi, Mr. Benecchi, and Ms. Cook represent each officer's respective payment pursuant to the Market Competitive Adjustment. The 2022 amount for Dr. Gault includes (i) her payment pursuant to the Market Competitive Adjustment and (ii) a \$200,000 signing bonus paid to Dr. Gault in accordance with her employment agreement. The Market Competitive Adjustment was approved by the Compensation Committee in February 2023 to align incentive cash award levels more closely with the market practices of our 2023 Peer Group. Cash bonus payments made in 2023 for performance in 2022 are set forth in the column labeled "Non-equity incentive plan compensation."
- (2) The amounts reported in the "Stock Awards" and "Option Awards" columns above do not reflect the amount of compensation actually received by the named executive officers from the stock options and PSUs during the fiscal year. The amounts reported in these columns represent the grant date fair value of the stock options and PSUs granted to the named executive officers during 2020, 2021 and 2022, calculated in accordance with the provisions of FASB Topic 718, not including any estimates of forfeitures related to service-based vesting conditions. See note 9 of "Notes to Consolidated Financial Statements" in our Annual Report on Form 10-K filed with the SEC on February 16, 2023 for a discussion of assumptions made by us in determining the grant date fair value of our stock option and PSU awards. In accordance with SEC rules, these amounts are calculated based on the probable outcome of the performance conditions as of the grant date. We assume for purposes of these calculations that the performance conditions for all PSU awards will be met at target.
- (3) The 2022 amounts represent cash bonus payments made in 2023 for performance in 2022; 2021 amounts represent cash bonus payments made in 2022 for performance in 2021; and 2020 amounts represent cash bonus payments made in 2021 for performance in 2020, in each case pursuant to a non-equity incentive plan. Mr. Greene became our Chief Executive Officer in December 2020 and was not eligible to receive a cash incentive award for 2020 performance.
- (4) The amounts reported represent imputed income for company-paid life insurance and 401(k) matching contributions made by us.
- (5) The amount reported reflects the grant date fair value, calculated in accordance with FASB Topic 718, of the new hire equity grant to Mr. Greene effected on January 4, 2021, and not the amount of cash compensation actually received by Mr. Greene from this stock option grant. The ultimate value of this equity award will depend on the level of achievement of various corporate performance-based vesting conditions and increases in our stock price, since 62.5% of the stock options were granted with vesting based on the achievement of strategic milestones and

- 37.5% of the stock options were granted with time-based vesting over four years, and in each case the exercise price is \$85.82, which was the closing price of our common stock on Nasdaq on the date of grant.
- (6) Mr. Greene was appointed as our Chief Executive Officer in December 2020. The amount in the "Salary" column consists of \$10,000 for consulting work performed prior to his appointment to the Board of Directors on October 1, 2020; \$9,488 of fees for his service on the Board of Directors from October 1, 2020, through the day prior to his appointment as Chief Executive Officer; and \$33,409 of salary in the role as Chief Executive Officer for the period from December 15, 2020, through December 31, 2020.
- (7) The amount reported represents the grant date fair value of Mr. Greene's initial director grant in connection with his joining our Board of Directors in October 2020.
- (8) Mr. Benecchi joined as our Chief Commercial Officer in September 2021. His 2021 salary and non-equity incentive plan compensation were prorated based on the number of calendar days Mr. Benecchi served as an employee in 2021. Effective June 16, 2022, Mr. Benecchi was promoted to Chief Business Officer, and in connection with this promotion, our Compensation Committee approved an increase to Mr. Benecchi's annualized base salary from \$444,642 to \$475,000.
- (9) Represents a signing bonus paid to Mr. Benecchi in accordance with his employment agreement.
- (10) Dr. Gault joined as our Chief Medical Officer in October 2022. Her 2022 salary and non-equity incentive plan compensation were prorated based on the number of calendar days Dr. Gault served as an employee in 2022.

Grants of Plan-Based Awards

The following table shows information regarding grants of plan-based awards during the fiscal year ended December 31, 2022 to our named executive officers.

| Name and Principal Position | Grant Date | Estimated Future Payouts Under Non- Equity Incentive Plan Awards(\$)(1) Target (\$) | Estimated Future Payouts Under Equity Incentive Plan Awards Maximum (\$) | Target (#) | All Other Option Awards: Number of Securities Underlying Options (#) | Exercise or Base Price of Option Awards (\$)(5) | Grant Date Fair Value of Stock and Option Awards (\$) (6) |
|---|--|---|---|------------------------|--|---|---|
| Barry E. Greene Chief Executive Officer and President | 2/11/22 2/11/22 | 494,471 — — | 988,942 — — | 57,040 (2) — | — 69,920 (3) | 43.04 | 2,455,002 1,958,007 |
| Kimi Iguchi Chief Financial Officer and Treasurer | 2/11/22 2/11/22 | 183,422 — — | 366,844 — — | 12,400 (2) | 15,200 (3) | 43.04 — | 425,901 533,696 |
| Christopher Benecchi Chief Business Officer | 2/11/22 2/11/22 6/16/22 6/16/22 | 190,000 | 380,000 — — — — — | 9,300 (2) 7,750 (2) | 11,400 (3) — — 9,500 (3) | 43.04 — — 31.36 | 319,081 400,272 243,040 199,552 |
| Anne Marie Cook Senior Vice President, General Counsel | 2/11/22 2/11/22 | 190,060 — — | 380,120 — — | 12,400 (2) | 15,200 (3) — | 43.04 — | 425,901 533,696 |
| Laura Gault, M.D., Ph.D. (4) Chief Medical Officer | 11/1/22 11/1/22 | 35,671 — — | 71,342 — — | 52,545 (2) | 64,410 (3) | 37.88 — | 1,643,308 1,990,405 |

(1) Represents the target amount of each executive's cash payments under our 2022 annual incentive program as established by the Compensation Committee (and with respect to our Chief Executive Officer, by our Board of Directors) and described in "Compensation Discussion and Analysis" above and as calculated by multiplying such executive's target cash incentive award percentage by his or her annual base salary, assuming 100% achievement of corporate and individual goals. There was no minimum amount payable for a specified level of performance under our 2022 annual incentive program; however, we have instituted a maximum payout cap of 200% of the bonus target for purposes of Annual Bonus Incentive Plan payouts, effective commencing with 2022

- compensation. Actual payments made for 2022 are provided in the "Non-equity incentive plan compensation" column of the "Summary Compensation Table" above.
- (2) Represents PSUs granted in 2022 subject to performance-based vesting criteria established by the Compensation Committee and described in the footnotes to the "Outstanding Equity Awards at December 31, 2022" table below.
- (3) Represents options granted in 2022 subject to time-based vesting of which 25% vested on the first anniversary of the grant date, and the remainder vesting in equal monthly installments over the 36 months following the first anniversary of the grant date.
- (4) Dr. Gault was hired as our Chief Medical Officer in October 2022. The estimated future payment under non-equity incentive plan awards amount was prorated based on the number of calendar days since Dr. Gault joined the Company.
- (5) The exercise price of these stock options was equal to the closing price of our common stock on Nasdaq on the grant date.
- (6) The amounts reported in this column do not represent cash compensation actually received by our named executive officers during the fiscal year, and the actual amount of compensation, if any, that our named executive officers are able to "realize" from these awards may vary significantly from the amounts shown, depending on the performance of our business and our stock price. Amounts represent the grant date fair value of the named executive officer's stock options and PSUs granted in 2022, calculated in accordance with FASB Topic 718, using the Black-Scholes valuation model for stock options. For purposes of these calculations, we have disregarded the estimate of forfeitures related to service-based vesting conditions.

Equity Compensation

Outstanding Equity Awards at December 31, 2022

The following table sets forth information regarding the outstanding equity awards held by each of the named executive officers as of December 31, 2022.

| | | Stock Awards (1) | | | | | |
|---|--|--|--|----------------------------------|------------------------------|---|--|
| Name | Number of Securities Underlying Unexercised Options (#) Exercisable | Number of Securities Underlying Unexercised Options (#) Unexercisable | Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options (#) | Option Exercise Price (\$) | Option Expiration Date | Equity Incentive Plan Awards: Number of Unearned Shares, Units or Other Rights that have Not Vested (#) | Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights that have Not Vested (\$) |
| Barry E. Greene | 14,444 | 5,556(2) | _ | 59.53 | 10/1/2030 | _ | _ |
| Chief Executive Officer and President | 195,000 | 195,000(3) | | 85.82 | 1/4/2031 | _ | _ |
| | _ | | 650,000(4) | 85.82 43.04 | 1/4/2031 2/11/2032 | _ | _ |
| | _ | 69,920(5) | _ | 45.04 | 2/11/2032 | 57,040(6) | 2,175,506 |
| Kimi Iguchi | 9,042 | _ | _ | 1.36 | 1/22/2024 | 57,040(0) — | |
| Chief Financial Officer and Treasurer | 20,000 | _ | _ | 38.25 | 1/23/2025 | _ | _ |
| | 31,200 | _ | _ | 38.25 | 1/23/2025 | _ | _ |
| | 15,000 | _ | _ | 28.63 | 2/8/2026 | _ | _ |
| | 22,500 14,850 | _ | _ | 47.70 47.70 | 2/6/2027 2/6/2027 | _ | _ |
| | 15,750 | _ | _ | 145.77 | 4/2/2028 | _ | _ |
| | 18,208 | 792(7) | _ | 157.63 | 2/13/2029 | _ | _ |
| | 12,396 | 5,104(8) | _ | 68.87 | 2/12/2030 | _ | _ |
| | | _ | _ | | | 5,250(9) | 200,235 |
| | 9,450 8,708 | 10,292(10) | _ | 39.87 82.27 | 4/28/2030 2/10/2031 | _ | _ |
| | 0,700 | 10,292(10) | _ | 02.27 | 2/10/2031 | 9,500(11) | 362,330 |
| | _ | 15,200(5) | _ | 43.04 | 2/11/2032 | - | |
| | _ | <u>—</u> | _ | _ | _ | 12,400(6) | 472,936 |
| Christopher Benecchi | 14,062 | 30,938(12) | _ | 45.29 | 10/1/2031 | | . |
| Chief Business Officer | _ | 11 400(5) | _ | 42.04 | 2/11/2022 | 22,500(13) | 858,150 |
| | | 11,400(5) | | 43.04 | 2/11/2032 | 9,300(6) | 354,702 |
| | _ | 9,500(14) | _ | 31.36 | 6/16/2032 | J,500(0) | |
| | _ | _ | _ | _ | _ | 7,750(15) | 295,585 |
| Anne Marie Cook | 109,300 | _ | _ | 56.27 | 9/16/2025 | | _ |
| Senior Vice President, General Counsel | 5,000 | _ | _ | 28.63 | 2/8/2026 | _ | _ |
| | 10,000 28,000 | _ | _ | 28.63 47.70 | 2/8/2026 2/6/2027 | _ | _ |
| | 18,480 | _ | _ | 47.70 | 2/6/2027 | _ | _ |
| | 15,750 | _ | _ | 145.77 | 4/2/2028 | _ | _ |
| | 18,208 | 792(7) | _ | 157.63 | 2/13/2029 | _ | _ |
| | 14,167 | 5,833(8) | _ | 68.87 | 2/12/2030 | C 000(0) | 220.040 |
| | 9,450 | _ | | 39.87 | 4/28/2030 | 6,000(9) | 228,840 |
| | 8,708 | 10,292(10) | _ | 82.27 | 2/10/2031 | _ | _ |
| | | | _ | _ | _ | 9,500(11) | 362,330 |
| | _ | 15,200(5) | _ | 43.04 | 2/11/2032 | <u>—</u> | · <u> </u> |
| I C I MD DID | _ | | _ | | | 12,400(6) | 472,936 |
| Laura Gault, M.D., Ph.D. Chief Medical Officer | _ | 64,410(16) | _ | 37.88 — | 11/1/2032 | 52,545(17) | 2,004,066 |

⁽¹⁾ The market value of the PSU awards in this column is based on the closing stock price of \$38.14 per share for our common stock as reported on Nasdaq on December 30, 2022, the last trading day in the fiscal year ended December 31, 2022.

- (2) Represents an option to purchase shares of our common stock granted on October 1, 2020. The shares underlying these options vest in equal monthly installments over the following three years.
- (3) Represents an option to purchase shares of our common stock granted on January 4, 2021. The shares underlying these options vest as follows: 25% vested on December 15, 2021, with the remainder of the shares vesting in equal monthly installments over the following three years.
- (4) Represents an option to purchase shares of our common stock granted on January 4, 2021. 60% and 40% of the shares underlying these options vest upon the achievement of regulatory and commercial milestones, respectively, which milestones have not yet been achieved.
- (5) Represents an option to purchase shares of our common stock granted on February 11, 2022. The shares underlying these options vest as follows: 25% vested on February 11, 2023, with the remainder of the shares vesting in equal monthly installments over the following three years.
- (6) Represents PSUs granted on February 11, 2022. 35%, 35% and 30% of the shares underlying these PSUs vest upon the achievement of commercial, regulatory, and clinical milestones, respectively, which milestones have not yet been achieved.
- (7) Represents an option to purchase shares of our common stock granted on February 13, 2019. The shares underlying these options vest as follows: 25% vested on February 13, 2020, with the remainder of the shares vesting in equal monthly installments over the following three years.
- (8) Represents an option to purchase shares of our common stock granted on February 12, 2020. The shares underlying these options vest as follows: 25% vested on February 12, 2021, with the remainder of the shares vesting in equal monthly installments over the following three years.
- (9) Represents PSUs granted on March 25, 2020. 67% and 33% of the shares underlying these PSUs vest upon the achievement of commercial and clinical milestones, respectively, which milestones have not yet been achieved.
- (10) Represents an option to purchase shares of our common stock granted on February 10, 2021. The shares underlying these options vest as follows: 25% vested on February 10, 2022, with the remainder of the shares vesting in equal monthly installments over the following three years.
- (11) Represents PSUs granted on February 10, 2021. 30% of the shares underlying these PSUs vested upon the achievement of a regulatory milestone on February 3, 2023. The remaining 70% of the shares underlying these PSUs vest upon the achievement of commercial milestones, which milestones have not yet been achieved.
- (12) Represents an option to purchase shares of our common stock granted on October 1, 2021. The shares underlying these options vest as follows: 25% vested on October 1, 2022, with the remainder of the shares vesting in equal monthly installments over the following three years.
- (13) Represents PSUs granted on October 1, 2021. 30% of the shares underlying these PSUs vested upon the achievement of a regulatory milestone on February 3, 2023. The remaining 70% of the shares underlying these PSUs vest upon the achievement of commercial milestones, which milestones have not yet been achieved.
- (14) Represents an option to purchase shares of our common stock granted on June 16, 2022. The shares underlying these options vest as follows: 25% will vest on June 16, 2023, with the remainder of the shares vesting in equal monthly installments over the following three years.
- (15) Represents PSUs granted on June 16, 2022. 35%, 35% and 30% of the shares underlying these PSUs vest upon the achievement of commercial, regulatory, and clinical milestones, respectively, which milestones have not yet been achieved.
- (16) Represents an option to purchase shares of our common stock granted on November 1, 2022. The shares underlying these options vest as follows: 25% will vest on November 1, 2023, with the remainder of the shares vesting in equal monthly installments over the following three years.
- (17) Represents PSUs granted on November 1, 2022. 35%, 35% and 30% of the shares underlying these PSUs vest upon the achievement of commercial, regulatory, and clinical milestones, respectively, which milestones have not yet been achieved.

Option Exercises

The following table shows the number of shares acquired upon exercise of stock options by each of our named executive officers during the year ended December 31, 2022. No shares were acquired by any of our named executive officers during the year ended December 31, 2022 pursuant to the vesting of PSUs

| | Option Awards | | |
|--------------------------|---|--|--|
| Name | Number of Shares Acquired on Exercise (#) | Value Realized on Exercise (\$)(1) | |
| Barry E. Greene | _ | _ | |
| Kimi Iguchi | 4,500 | 144,990 | |
| Christopher Benecchi | _ | _ | |
| Anne Marie Cook | - | <u> </u> | |
| Laura Gault, M.D., Ph.D. | _ | _ | |

(1) Value realized on exercise of stock option awards does not represent proceeds from any sale of any shares of common stock acquired upon exercise, but is determined by multiplying the number of shares acquired upon exercise by the difference between the exercise price of the stock option and the closing price of our common stock on Nasdaq at each time of exercise.

EMPLOYMENT AGREEMENTS WITH OUR NAMED EXECUTIVE OFFICERS

We have entered into an employment agreement or letter agreement with each of our named executive officers in connection with their employment with us. Except as noted below, these employment agreements and letter agreements provide for "at will" employment.

Barry E. Greene. We entered into a letter agreement with Mr. Greene in December 2020, when he assumed the role of Chief Executive Officer. Mr. Greene's base salary is subject to adjustment at the discretion of the Board of Directors and was \$760,725 for 2022. Mr. Greene is also eligible to receive an annual cash incentive award targeted at 65% of his annual base salary, which is based 100% on the achievement of our corporate goals. Mr. Greene is eligible to participate in our employee benefit plans, subject to the terms of those plans.

Kimi Iguchi. We entered into a letter agreement with Ms. Iguchi in February 2013, and she assumed the role of Chief Financial Officer in March 2013. Ms. Iguchi's base salary is subject to adjustment at the discretion of the Compensation Committee and was \$458,556 for 2022. Ms. Iguchi is also eligible to receive an annual cash incentive award targeted at 40% of her annual base salary, payable at the discretion of the Compensation Committee. Ms. Iguchi is eligible to participate in our employee benefit plans, subject to the terms of those plans.

Christopher Benecchi. We entered into a letter agreement with Mr. Benecchi in August 2021, and he assumed the role of Chief Commercial Officer on September 13, 2021. Effective June 16, 2022, Mr. Benecchi was promoted to Chief Business Officer. Mr. Benecchi's base salary is subject to adjustment at the discretion of the Compensation Committee and, on June 16, 2022, his annualized base salary was increased to \$475,000. Mr. Benecchi also received a sign-on bonus of \$200,000 in September 2021, which was subject to 100% repayment if Mr. Benecchi voluntarily terminates his employment with us within the first 12 months of receiving the sign-on bonus and remains subject to 50% repayment if Mr. Benecchi voluntarily terminates his employment with us within 13-24 months of receiving the sign-on bonus. Mr. Benecchi is also eligible to receive an annual cash incentive award targeted at 40% of his annual base salary, payable at the discretion of the Compensation Committee. Mr. Benecchi is eligible to participate in our employee benefit plans, subject to the terms of those plans.

Anne Marie Cook. We entered into a letter agreement with Ms. Cook in August 2015, and she assumed the role of Senior Vice President and General Counsel in September 2015. Ms. Cook's base salary is subject to adjustment at the discretion of the Compensation Committee and was \$475,151 for 2022. Ms. Cook is also eligible to receive an annual cash incentive award targeted at 40% of her annual base salary, payable at the discretion of the Compensation Committee. Ms. Cook is eligible to participate in our employee benefit plans, subject to the terms of those plans.

Laura Gault, M.D., Ph.D. We entered into a letter agreement with Dr. Gault and she assumed the role of Chief Medical Officer in October 2022. Dr. Gault received an annualized base salary of \$525,000 for 2022, which is subject to adjustment at the discretion of the Compensation Committee. Dr. Gault also received a sign-on bonus of \$200,000 in November 2022, which is subject to 100% repayment if Dr. Gault voluntarily terminates her employment with us within the first 12 months of receiving the sign-on bonus or 50% repayment if Dr. Gault voluntarily terminates her employment with us within 13-24 months of receiving the sign-on bonus. Dr. Gault is also eligible to receive an annual cash incentive award targeted at 40% of her annual base salary, payable at the discretion of the Compensation Committee. Dr. Gault is eligible to participate in our employee benefit plans, subject to the terms of those plans.

Pension Benefits

None of our named executive officers participated in or had account balances in qualified or nonqualified defined benefit plans sponsored by us as of December 31, 2022.

Nonqualified Deferred Compensation

None of our named executive officers participated in or had account balances in nonqualified defined contribution or nonqualified deferred compensation plans maintained by us as of December 31, 2022.

Payments Provided upon Termination without Cause and Change in Control

We have entered into severance and change in control agreements, or severance agreements, with each of our named executive officers. Pursuant to their severance agreements, each of our named executive officers is eligible to receive

certain payments and benefits from us in the event that such officer's employment is terminated by us without "cause" (as defined below and in the applicable severance agreement), or in the event that such officer terminates his or her employment with "good reason" (as defined in the applicable severance agreement).

In the event that one of our named executive officers terminates his or her employment with "good reason" or is terminated without "cause," other than in the event of a change of control, he or she is eligible to receive 12 months of base salary continuation and 12 months of COBRA continuation medical benefits subsidized by us, provided that the terminated executive officer executes, and does not revoke, a separation agreement and release of us and our affiliates. Our standard form of separation agreement and release includes, among other provisions, non-solicitation, non-competition, non-disclosure, and non-disparagement obligations.

Pursuant to their severance agreements, in the event that any of the named executive officers terminates his or her employment with "good reason" or is terminated without "cause" within the 12-month period following a "change in control" (as defined in the applicable severance agreement), such officer will be eligible to receive a lump-sum cash payment equal to (i) 12 months (in the case of Mr. Greene) and 9 months (for all others) of the executive's base salary, (ii) a pro rata portion of that individual's target performance-based cash compensation for that fiscal year based on the number of days worked in that fiscal year at the time of termination, and (iii) 12 times the monthly employer health insurance contribution, provided that in each case, the terminated executive officer executes, and does not revoke, a separation agreement and release of us and our affiliates. In addition, all stock options and other stock-based awards with time-based vesting held by such officer shall immediately accelerate and become fully exercisable or nonforfeitable as of the date of termination.

Definitions

For purposes of the severance agreement with each of our named executive officers, "cause" means:

- · indictment for any felony, any crime involving us, or any crime involving fraud, moral turpitude or dishonesty;
- any unauthorized use or disclosure of our proprietary information;
- any intentional misconduct or gross negligence on the officer's part which has a materially adverse effect on our business or reputation; or
- the officer's repeated and willful failure to perform the duties, functions and responsibilities of the officer's position after a written warning from us.

For purposes of the severance agreement with each of our named executive officers, "good reason" means:

- a material diminution in the officer's responsibilities, authority or duties;
- a material diminution in the officer's base salary except for across-the-board salary reductions based on our financial performance similarly affecting all or substantially all of our senior management employees;
- a material change, defined as 50 miles or more, in the geographic location at which such officer is required to provide services to the Company, not including business travel and short-term assignments; or
- a material breach of the severance agreement by the Company.

For purposes of the severance agreement with each of our named executive officers, a "change in control" shall be deemed to have occurred upon the occurrence of any one of the following events:

- the sale of all or substantially all of our assets on a consolidated basis to an unrelated person or entity;
- a merger, reorganization or consolidation pursuant to which the holders of our outstanding voting power and outstanding stock immediately prior to such transaction do not own a majority of the outstanding voting power and outstanding stock or other equity interests of the resulting or successor entity (or its ultimate parent, if applicable) immediately upon completion of such transaction;
- the sale of all of our stock to an unrelated person, entity or group thereof acting in concert; or

any other transaction in which the owners of our outstanding voting power immediately prior to such transaction do not own at least a
majority of the outstanding voting power of the Company or any successor entity immediately upon completion of the transaction,
other than as a result of the acquisition of securities directly from the Company.

Estimated Payments and Benefits Upon Termination or Change of Control

The amount of compensation and benefits payable to each named executive officer in various termination and change in control situations has been estimated in the tables below. The value of the equity vesting acceleration was calculated for each of the tables below based on the assumption that the change in control and executive's employment termination occurred on December 31, 2022. The closing price of our stock on Nasdaq as of December 30, 2022, the last trading day in the fiscal year ended December 31, 2022, was \$38.14, which was used as the value of our stock in the change in control calculation. The value of the option vesting acceleration was calculated by multiplying the number of unvested stock options subject to vesting acceleration as of December 31, 2022 by the difference between the closing price of our stock as of December 30, 2022 and the exercise price for such unvested stock options.

Barry E. Greene

The following table describes the potential payments and benefits upon employment termination for Barry E. Greene, our Chief Executive Officer, as if his employment terminated as of December 31, 2022.

| Executive Benefits and Payment upon Termination | Voluntary Resignation not for Good Reason (\$) | Voluntary Resignation for Good Reason (\$) | Termination by Company not for Cause (\$) | Termination by Company not for Cause or Voluntary Resignation for Good Reason in Connection with or Following Change in Control (\$) |
|--|--|---|---|--|
| Compensation: | | | | |
| Base salary | <u> </u> | 760,725(1) | 760,725(1) | 760,725(2) |
| Cash incentive bonus | <u> </u> | _ | _ | 494,471(3) |
| Stock options unvested and accelerated | _ | _ | _ | _ |
| Benefits and Perquisites: | | | | |
| Health care continuation | <u> </u> | 28,167(4) | 28,167(4) | 28,167(4) |
| Total | _ | 788,892 | 788,892 | 1,283,363 |

- (1) 12 months of 2022 base salary continuation.
- (2) 12 months of base salary prior to the termination, payable in a lump sum.
- (3) Target bonus for 2022, assuming bonus compensation is unpaid.
- (4) Cash payment equal to the COBRA health and dental insurance premiums for 12 months.

Kimi Iguchi

The following table describes the potential payments and benefits upon employment termination for Kimi Iguchi, our Chief Financial Officer and Treasurer, as if her employment terminated as of December 31, 2022.

| Executive Benefits and Payment upon Termination | Voluntary Resignation not for Good Reason (\$) | Voluntary Resignation for Good Reason (\$) | Termination by Company not for Cause (\$) | Termination by Company not for Cause or Voluntary Resignation for Good Reason in Connection with or Following Change in Control (\$) |
|--|--|---|---|--|
| Compensation: | | | | |
| Base salary | _ | 458,556(1) | 458,556(1) | 343,917(2) |
| Cash incentive bonus | _ | _ | _ | 183,422(3) |
| Stock options unvested and accelerated | _ | _ | _ | _ |
| Benefits and Perquisites: | | | | |
| Health care continuation | _ | 19,767(4) | 19,767(4) | 19,767(4) |
| Total | _ | 478,323 | 478,323 | 547,106 |

- (1) 12 months of 2022 base salary continuation.
- (2) 9 months of base salary prior to the termination, payable in a lump sum.
- (3) Target bonus for 2022, assuming bonus compensation is unpaid.
- (4) Cash payment equal to the COBRA health and dental insurance premiums for 12 months.

Christopher Benecchi

The following table describes the potential payments and benefits upon employment termination for Christopher Benecchi, our Chief Business Officer, as if his employment terminated as of December 31, 2022.

| Executive Benefits and Payment upon Termination | Voluntary Resignation not for Good Reason (\$) | Voluntary Resignation for Good Reason (\$) | Termination by Company not for Cause (\$) | Termination by Company not for Cause or Voluntary Resignation for Good Reason in Connection with or Following Change in Control (\$) |
|--|--|---|---|--|
| Compensation: | | | | |
| Base salary | _ | 475,000(1) | 475,000(1) | 356,250(2) |
| Cash incentive bonus | _ | _ | _ | 190,000(3) |
| Stock options unvested and accelerated | _ | _ | _ | 64,410(4) |
| Benefits and Perquisites: | | | | |
| Health care continuation | _ | 28,167(5) | 28,167(5) | 28,167(5) |
| Total | | 503,167 | 503,167 | 638,827 |

- (1) 12 months of 2022 base salary continuation.
- (2) 9 months of base salary prior to the termination, payable in a lump sum.
- (3) Target bonus for 2022, assuming bonus compensation is unpaid.
- (4) Acceleration of 100% of Mr. Benecchi's then-outstanding and unvested time-based stock options.
- (5) Cash payment equal to the COBRA health and dental insurance premiums for 12 months.

Anne Marie Cook

The following table describes the potential payments and benefits upon employment termination for Anne Marie Cook, our Senior Vice President, General Counsel, as if her employment terminated as of December 31, 2022.

| Executive Benefits and Payment upon Termination | Voluntary Resignation not for Good Reason (\$) | Voluntary Resignation for Good Reason (\$) | Termination by Company not for Cause (\$) | Termination by Company not for Cause or Voluntary Resignation for Good Reason in Connection with or Following Change in Control (\$) |
|--|--|---|---|--|
| Compensation: | | | | |
| Base salary | _ | 475,151(1) | 475,151(1) | 356,363(2) |
| Cash incentive bonus | _ | _ | _ | 190,060(3) |
| Stock options unvested and accelerated | _ | _ | _ | _ |
| Benefits and Perquisites: | | | | |
| Health care continuation | _ | 9,983(4) | 9,983(4) | 9,983(4) |
| Total | _ | 485,134 | 485,134 | 556,406 |

- (1) 12 months of 2022 base salary continuation.
- (2) 9 months of base salary prior to the termination, payable in a lump sum.
- (3) Target bonus for 2022, assuming bonus compensation is unpaid.
- (4) Cash payment equal to the COBRA health and dental insurance premiums for 12 months.

Laura Gault, M.D., Ph.D.

The following table describes the potential payments and benefits upon employment termination for Laura Gault, M.D., Ph.D., our Chief Medical Officer, as if her employment terminated as of December 31, 2022.

| Executive Benefits and Payment upon Termination | Voluntary Resignation not for Good Reason (\$) | Voluntary Resignation for Good Reason (\$) | Termination by Company not for Cause (\$) | Termination by Company not for Cause or Voluntary Resignation for Good Reason in Connection with or Following Change in Control (\$) |
|--|--|---|---|--|
| Compensation: | | | | |
| Base salary | _ | 525,000(1) | 525,000(1) | 393,750(2) |
| Cash incentive bonus | _ | _ | _ | 35,671(3) |
| Stock options unvested and accelerated | _ | _ | _ | 16,747(4) |
| Benefits and Perquisites: | _ | | | |
| Health care continuation | _ | 28,167(5) | 28,167(5) | 28,167(5) |
| Total | | 553,167 | 553,167 | 474,335 |

- (1) 12 months of 2022 base salary continuation.
- (2) 9 months of base salary prior to the termination, payable in a lump sum.
- (3) Prorated target bonus for 2022, assuming bonus compensation is unpaid.
- (4) Acceleration of 100% of Dr. Gault's then-outstanding and unvested time-based stock options.
- (5) Cash payment equal to the COBRA health and dental insurance premiums for 12 months.

Director Compensation

Building a biopharmaceutical company and helping it achieve commercial success require highly qualified directors with exceptional experience leading and building companies who can help guide us through our growth and challenges. To attract, motivate, and retain, on a long-term basis, uniquely talented directors with leadership and expertise building companies in this industry, and to align their interests with those of Sage's stockholders, we use an incentive-based approach to director compensation that consists largely of stock options.

Our Compensation Committee undergoes a rigorous process in annually reassessing director compensation, guided by clear principles, a deliberate structural approach, and detailed review of market benchmarking by Alpine, our independent compensation consultant. Our Compensation Committee is responsible for making recommendations to our Board of Directors on appropriate compensation levels and arrangements for our non-employee directors, ensuring they are consistent with our compensation policy and remain competitive with our peer group. The Compensation Committee reviews our non-employee director compensation on an annual basis and in making recommendations to our Board of Directors, the Compensation Committee reviews the advice of Alpine.

In line with our objectives, our non-employee director long-term incentive program is delivered in the form of stock options, which only allow the recipient to realize value when value is created for stockholders (i.e., if the stock price exceeds the exercise price). Given the nature of this vehicle and our historical volatility, we do not believe that accounting value, which is the grant date fair value of an option award calculated in accordance with FASB Topic 718 using the Black-Scholes methodology, should be the sole or primary measure in determining the size of equity awards. To that end, the Compensation Committee uses percent ownership of the Company represented by the shares underlying the equity grant being awarded, with sensitivity towards short-, medium- and long-term dilution, as the primary measure in determining the appropriate levels of equity grants to non-employee directors. Accounting value and current value of historical awards are additional measures considered to ensure appropriate stewardship of the equity plan and reasonable delivery of value to equity recipients. We believe using percent-of-company as the primary measure in benchmarking is appropriate and reasonable for a company at our stage of development and given the volatility of the Company's stock price. The Compensation Committee also considers the risks inherent in being a biotechnology company in the early stages of commercialization while also focusing on advancing development of our clinical portfolio and our earlier stage programs and continuing to innovate with our robust research engine to create future stockholder value. We believe this holistic approach enables more complete and balanced decision-making.

Based on these considerations, our Board of Directors has adopted a non-employee director compensation policy that provides directors annual cash fees for board and committee service as well as an initial stock option grant when joining the Board of Directors, followed by annual stock option grants, as described below. To date, we have not granted restricted stock or restricted stock units under our non-employee director compensation program. The non-executive chair of our Board of Directors and the chairs of each of our committees are entitled to greater cash compensation for his or her services than other members of our Board of Directors, which we believe is commensurate with the additional time commitment and additional responsibility required by the position held and is consistent with the compensation practices of our peer group companies.

The following table sets forth a summary of the cash compensation we paid to our non-employee directors during 2022 and the FASB Topic 718 grant date fair value using the Black-Scholes valuation model for stock options granted to our non-employee directors in that period. We reimburse non-employee directors for reasonable travel expenses. Mr. Greene, our Chief Executive Officer, receives no compensation for his service as a director. The compensation earned by Mr. Greene during 2022 is presented in the "Summary Compensation Table" above. Dr. Jonas, our former Chief Innovation Officer, received no compensation for his service as a director while serving as an employee. No value is realized from the stock option grants to directors unless the Company's stock price appreciates, notwithstanding the equity grant values disclosed in the table below, which were calculated in accordance with FASB Topic 718 using the Black-Scholes valuation model. Given that few of the directors' grants are "in the money", the risks associated with our stage of development, and the volatility of our stock price, as described above, we believe the grant date fair value of the option awards is not a meaningful metric as to actual realizable value.

| Name (1) | Fees Earned or Paid in Cash (\$) | Option Awards (\$)(2) | All Other Compensation (\$) | Total (\$) |
|------------------------------|--|-----------------------------|-----------------------------------|---------------|
| Steven Paul, M.D. (3) | 53,658 | 201,218 | - | 254,876 |
| Kevin P. Starr | 88,639 | 201,218 | - | 289,857 |
| James M. Frates | 76,139 | 201,218 | - | 277,357 |
| Michael F. Cola | 73,639 | 201,218 | - | 274,857 |
| Geno Germano | 58,639 | 201,218 | - | 259,857 |
| Elizabeth Barrett (3) | 66,158 | 201,218 | - | 267,376 |
| George Golumbeski, Ph.D. (3) | 53,658 | 201,218 | - | 254,876 |
| Jeffrey M. Jonas, M.D. (4). | 7,361 | - | 1,842,000 | 1,849,361 |

- (1) The aggregate number of shares subject to stock option awards outstanding as of December 31, 2022 for the non-employee members of the Board of Directors was: Dr. Paul: 93,429, Mr. Starr: 91,791, Mr. Frates: 85,100, Mr. Cola: 112,624, Mr. Germano: 85,708, Ms. Barrett: 62,910, Dr. Golumbeski: 63,393, and Dr. Jonas: 671,028. In addition, Dr. Jonas held an aggregate of 44,400 shares subject to PSU awards outstanding as of December 31, 2022. All grants made to Dr. Jonas were granted in connection with his service to Sage as an employee, which ended on November 8, 2022. On November 9, 2022, Dr. Jonas became a non-employee member of the Board of Directors.
- (2) Amounts for stock option awards represent the aggregate grant date fair value of stock option awards granted to our directors in 2022 computed in accordance with FASB Topic 718. The assumptions used in the valuation of these awards are consistent with the valuation methodologies specified in the notes to our consolidated financial statements included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2022, as filed with the SEC. The amount represents the grant date fair value calculated in accordance with FASB Topic 718 using the Black-Scholes valuation methodology for stock option grants made during 2022. The amounts above reflect our aggregate accounting expense for these awards and do not necessarily correspond to the actual value that will be recognized by the directors.
- (3) Dr. Paul, Ms. Barrett and Dr. Golumbeski elected to receive a grant of stock options in lieu of the cash retainer as payment for services rendered during 2022 and the grant date fair value of the grant was \$43,228, \$54,048 and \$43,228, respectively. The amount indicated in the "Fees Earned or Paid in Cash" column represents the forgone cash retainer for Dr. Paul, Ms. Barrett and Dr. Golumbeski for 2022 board services.
- (4) Other compensation for Dr. Jonas includes (i) \$553,763 in salary compensation; (ii) \$16,368 in company-paid life insurance and 401(k) matching contributions; (iii) \$305,649 in non-equity incentive plan compensation; and (iv) \$959,135 in stock and option awards, in each case earned while serving as an employee of the Company

between January 1, 2022, and November 8, 2022, and \$7,085 in cash compensation earned while serving as a consultant to the Company from November 9, 2022 through December 31, 2022.

The table below shows the cash retainers that our directors are eligible to receive under our current non-employee director compensation policy, as amended by our Board of Directors in March 2023.

| | Annual Retainer ⁽¹⁾ | |
|--|-----------------------------------|--------|
| Board of Directors: | | |
| All non-employee members | \$ | 50,000 |
| Additional retainer for Non-Executive Chair of the Board | \$ | 35,000 |
| Audit Committee: | | |
| Chair | \$ | 20,000 |
| Non-Chair members | \$ | 10,000 |
| Compensation Committee: | | |
| Chair | \$ | 15,000 |
| Non-Chair members | \$ | 7,500 |
| Nominating and Corporate Governance Committee: | | |
| Chair | \$ | 10,000 |
| Non-Chair members | \$ | 5,000 |
| Science and Technology Committee: | | |
| Chair | \$ | 15,000 |
| Non-Chair members | \$ | 7,500 |

(1) The annual retainer for all non-employee members of our Board of Directors was increased from \$45,000 to \$50,000 in April 2022. In addition, the non-employee director compensation policy was amended in December 2022 to provide for cash retainers for directors serving on the Science and Technology Committee, effective January 1, 2023. Effective March 23, 2023, the non-employee director compensation policy was further amended to reduce the additional cash retainer for the Non-Executive Chair of the Board from \$40,000 to \$35,000. No further changes were made to the non-employee director compensation policy in connection with the March 2023 amendment.

Under our non-employee director compensation policy, the cash retainers paid to non-employee directors will not exceed the 75th percentile paid by our peer group for the prior year. In addition, our annual stock option grants to incumbent directors will not exceed the lesser of (i) a percent of the Company equal to the 65th percentile of the annual equity grants, calculated as a percent of the Company, of our peer group as then-approved by the Compensation Committee and (ii) a Black-Scholes value (calculated in accordance with FASB Topic 718) equal to the highest reported value of the annual equity compensation awarded to non-employee directors by any member of our peer group in the prior year. The stock option grants to any newly-appointed directors will not exceed two times the annual equity grant most recently made to our incumbent non-employee directors. In 2022, the Board approved an annual equity grant for non-employee directors in the form of a stock option for the purchase of 9,947 shares of our common stock, to be granted on the date of our 2022 annual meeting of stockholders and to vest in full upon the earlier of the first anniversary of the date of grant or the day prior to our next annual meeting of stockholders, subject to the director's continued service on the Board of Directors. The Board also approved in 2022 an equity grant in the form of a stock option for the purchase of 19,894 shares for any new non-employee directors appointed following the next annual grant made at the 2022 annual meeting of stockholders. Such initial equity grant shall vest in equal monthly installments during the 36 months following the grant date, subject to the non-employee director's continued service on the Board of Directors.

In March 2023, the Board approved an annual equity grant for non-employee directors in the form of a stock option for the purchase of 10,000 shares of our common stock, to be granted on the date of our Annual Meeting in 2023 and to vest in full upon the earlier of the first anniversary of the date of grant or the day prior to our next annual meeting of stockholders, subject to the director's continued service on the Board of Directors. The Board also approved an equity grant in the form of a stock option for the purchase of 20,000 shares for any new non-employee directors appointed following the next annual grant made at the Annual Meeting. Such initial equity grant shall vest in equal monthly installments during the 36 months following the grant date, subject to the non-employee director's continued service on the Board of Directors.

Immediately prior to the April 2022 amendment, our non-employee director compensation policy provided that each of our incumbent non-employee directors would receive a fixed annual option grant to purchase 10,000 shares of our common stock, which vested in full upon the earlier of the first anniversary of the date of grant or the day prior to the next annual meeting of stockholders, subject to the non-employee director's continued service on the Board of Directors. In addition, the prior policy provided that a newly appointed or elected director was eligible for an option grant to purchase 20,000 shares of our common stock on the date he or she became a non-employee director, which vested in equal monthly installments during the 36 months following the grant date, subject to the non-employee director's continued service on the Board of Directors.

All options granted to non-employee directors have an exercise price per share equal to the fair market value of a share of our common stock on the date of grant.

All of our directors are subject to stock ownership guidelines. Our employee directors are subject to guidelines established for our executives, while our non-employee directors are subject to guidelines established in 2020. These non-employee director stock ownership guidelines specify the number of shares that our directors must accumulate and hold within five years from the effective date of implementation of the guidelines, or, for future new directors, within five years from the date the director was appointed to the Board of Directors. Under the guidelines, ownership targets are set at a value greater than or equal to three times the annual retainer for service as a director. Shares owned outright and vested but unexercised "in-the-money" stock options will count towards meeting the requirement. The Compensation Committee reviews compliance periodically, valuing stock at the fair market value around the date of review.

To further align director compensation to stockholder value creation, the non-employee director compensation policy allows non-employee directors to elect to receive a stock option award in lieu of their cash retainers as payment for their services on our Board of Directors and any committees. Non-employee directors who wish to participate must elect to receive the stock option award before January 1 of the year in which the cash compensation would otherwise be received, which we refer to as the Payment Year. Options are granted on the second business day of the Payment Year, and full vesting occurs on the last business day of the Payment Year. The number of shares underlying each option will be determined on the first business day of the Payment Year, and will equal the amount of cash retainers the director would receive in the Payment Year, divided by the product of (x) the closing trading price of our common stock on such first business day of the Payment Year and (y) 70%, which approximates a Black-Scholes valuation. Ms. Barrett, Dr. Golumbeski and Dr. Paul each made this election in December 2021 for their Board service in 2022, and Dr. Golumbeski and Dr. Paul made this election in December 2023.

CEO PAY RATIO

During fiscal year 2022, the annual total compensation for Mr. Greene, our Chief Executive Officer, was \$5,705,164. The annual total compensation for our median employee in 2022 was \$307,265, inclusive of cash compensation and the grant date fair values of equity awards calculated in accordance with FASB Topic 718 and using the Black-Scholes valuation model, resulting in a pay ratio of approximately 19:1. This ratio represents a significant decrease from the pay ratio disclosed in our proxy statement filed in 2022 primarily because the prior pay ratio reflected a one-time new hire equity grant made to our Chief Executive Officer in January 2021. The current pay ratio reflects an annual equity grant consistent with our past practices for our Chief Executive Officer and is comparable to the pay ratio disclosed in our proxy statement filed in 2021 for the fiscal year ended 2020 (14:1).

As permitted under applicable SEC rules, we selected our median employee as of December 31, 2021, and following our determination that, since December 31, 2021, there has been no change in our employee population or employee compensation arrangements that we believe would significantly impact the pay ratio disclosure for 2022 and require the calculation of a new median employee, we selected the same median employee for 2022. We identified the median employee by (i) aggregating for each of our applicable employees on December 31, 2021 (the median employee determination date) (A) the annual base salary for permanent salaried employees, or the hourly rate multiplied by expected annual work schedule, for hourly employees, (B) the target incentive compensation for 2021, and (C) the estimated grant date fair value for all equity awards granted during 2021 and (ii) ranking this compensation measure for our employees from lowest to highest. This calculation was performed for all employees as of the median employee determination date, excluding Mr. Greene. Components of compensation paid in currencies other than U.S. dollars were converted into U.S. dollars using the annual average exchange rate as of the median employee determination date; no other adjustments were made. After identifying the median employee, we calculated the median employee's annual total compensation in accordance with the requirements of the Summary Compensation Table. Our originally selected median employee had a hire date during the fiscal year, which significantly impacted the pay ratio calculation. Therefore, as permitted under SEC guidance, we selected another similarly compensated employee who was not a new hire to serve as a substitute median compensated employee, for purposes of the pay ratio calculation.

The pay ratio reported above is a reasonable estimate calculated in a manner consistent with SEC rules based on our internal records and the methodology described above. The SEC rules for identifying the median-compensated employee and calculating the pay ratio based on that employee's annual total compensation allow companies to adopt a variety of methodologies, to apply certain exclusions, and to make reasonable estimates and assumptions that reflect their employee populations and compensation practices. Therefore, the pay ratio reported by other companies may not be comparable to the pay ratio reported above, as other companies have different employee populations and compensation practices and may utilize different methodologies, exclusions, estimates and assumptions in calculating their pay ratios.



PAY VERSUS PERFORMANCE

The following tables and related disclosures provide information about (i) the total compensation of our principal executive officers, or our PEOs, and our other named executive officers, or our Other NEOs, as presented in the Summary Compensation Tables for the applicable years, or the SCT Amounts; (ii) the compensation actually paid to our PEOs and our Other NEOs, as calculated pursuant to the SEC's pay-versus-performance rules, or the CAP Amounts; (iii) certain financial performance measures; and (iv) the relationship of the CAP Amounts to those financial performance measures.

This disclosure has been prepared in accordance with Item 402(v) of Regulation S-K under the Exchange Act and Section 953(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and does not necessarily reflect value actually realized by our executive officers or how our Compensation Committee evaluates compensation decisions in light of company or individual performance. SEC rules require certain adjustments be made to the SCT Amounts to determine compensation actually paid as reported in the Pay Versus Performance Table below. In general, compensation actually paid is calculated by adjusting the SCT Amounts to include the fair market value of equity awards as of December 31 of the applicable year or, if earlier, the vesting date (rather than the grant date). The Company does not have a defined benefit plan so no adjustment for pension benefits is included in the table. Similarly, no adjustment is made for dividends as the Company does not pay dividends. For discussion of how our Compensation Committee seeks to align pay with performance when making compensation decisions, please review Compensation Discussion and Analysis beginning on page 38.

| | | | | | | | Value of Initial Fixed \$100 Investment Based On: | | | | |
|----------------|--|--|--|--|---|---|--|-------------------------|--|-----------------------------------|--|
| Fiscal Year | Summary Compensation Table Total for First PEO (4)(\$) | Summary Compensation Table Total for Second PEO (4)(\$) | Compensation Actually Paid to First PEO (5)(\$) | Compensation Actually Paid to Second PEO (5)(\$) | Average Summary Compensation Table Total for Non-PEO NEOs(4)(\$) | Average Compensation Actually Paid to Non-PEO NEOs(5)(\$) | Sage TSR(6) | Peer Group TSR(7) | Net income (loss) (\$ millions)(8) | Company Selected Measure(9) | |
| 2022(1) | 5,705,164 | _ | 3,563,623 | _ | 2,282,416 | 2,071,551 | \$ 53 | \$ 111 | (532.8) | N/A | |
| 2021(2) | 58,864,150 | _ | 8,431,100 | _ | 3,024,803 | 534,653 | \$ 59 | \$ 125 | (457.9) | N/A | |
| 2020(3) | 826,052 | 4,670,003 | 1,265,945 | 4,698,361 | 2,718,961 | 3,077,346 | \$ 120 | \$ 126 | 606.1 | N/A | |

- (1) For 2022, our PEO was Barry E. Greene and our Other NEOs were Kimi Iguchi, Christopher Benecchi, Anne Marie Cook and Laura Gault, M.D., Ph.D.
- (2) For 2021, our PEO was Barry E. Greene and our Other NEOs were Kimi Iguchi, Christopher Benecchi, Jeffrey M. Jonas, M.D. and Albert J. Robichaud, Ph.D.
- (3) For 2020, Barry E. Greene was our PEO from December 15, 2020 through December 31, 2020 and is referred to as the First PEO. Jeffrey M. Jonas, M.D. was our PEO from January 1, 2020 through December 14, 2020 and is referred to as the Second PEO. Our Other NEOs were Kimi Iguchi, Michael Cloonan, Anne Marie Cook and Albert J. Robichaud, Ph.D.
- (4) For the years 2022, 2021 and 2020, these SCT Amounts are total compensation, as shown in the Summary Compensation Table from the relevant year.
- (5) The SCT Amounts reported for our PEO or PEOs, as applicable, and the average of our Other NEOs for each year were subject to the following adjustments per Item 402(v)(2)(iii) of Regulation S-K to calculate compensation actually paid:

First PEO - Barry E. Greene

| Year | 2020 | 2021 | 2022 |
|---|-----------------|------------------|-----------------|
| SCT Amount | \$ 826,052 | \$ 58,864,150 | \$ 5,705,164 |
| - Grant Date Fair Value of Option Awards and Stock Awards Granted in Fiscal Year | (771,858) | (57,615,277) | (4,413,009) |
| + Fair Value at Fiscal Year-End of Outstanding and Unvested Option Awards and Stock Awards Granted in Fiscal Year | 1,157,954 | 6,065,298 | 3,806,807 |
| + Change in Fair Value of Outstanding and Unvested Option Awards and Stock Awards Granted in Prior Fiscal Years | - | (473,055) | (1,068,567) |
| + Fair Value at Vesting of Option Awards and Stock Awards Granted in Fiscal Year That Vested During Fiscal Year | 53,797 | 1,728,189 | - |
| + Change in Fair Value as of Vesting Date of Option Awards and Stock Awards Granted in Prior Fiscal Years For Which Applicable Vesting Conditions Were Satisfied During Fiscal Year | - | (138,205) | (466,772) |
| - Fair Value as of Prior Fiscal Year-End of Option Awards and Stock Awards Granted in Prior Fiscal Years That Failed to Meet Applicable Vesting Conditions During Fiscal Year | - | - | - |
| CAP Amount | \$ 1,265,945 | \$ 8,431,100 | \$ 3,563,623 |
| Second PEO – Jeffrey M. Jonas, M.D. | | | |
| | | | |
| Year | 2020 | 2021 | 2022 |
| SCT Amount | \$ 4,670,003 | \$ - | \$ - |
| Grant Date Fair Value of Option Awards and Stock Awards Granted in Fiscal Year Fair Value at Fiscal Year-End of Outstanding and Unvested Option Awards and Stock Awards Granted in Fiscal Year | (3,473,072) | | - |
| + Change in Fair Value of Outstanding and Unvested Option Awards and Stock Awards Granted in Prior Fiscal Years | 218,141 | | - |
| + Fair Value at Vesting of Option Awards and Stock Awards Granted in Fiscal Year That Vested During Fiscal Year | - | - | - |
| + Change in Fair Value as of Vesting Date of Option Awards and Stock Awards Granted in Prior Fiscal Years For Which Applicable Vesting Conditions Were Satisfied During Fiscal Year | (639,514) | - | - |
| - Fair Value as of Prior Fiscal Year-End of Option Awards and Stock Awards Granted in Prior Fiscal Years That Failed to Meet Applicable Vesting Conditions During Fiscal Year | - | - | - |
| CAP Amount | \$ 4,698,361 | \$ - | \$ - |
| Average – Non-PEO NEOs | | | |
| • | | | |
| Year | 2020 | 2021 | 2022 |
| SCT Amount | \$ 2,718,961 | \$ 3,024,803 | \$ 2,282,416 |
| - Grant Date Fair Value of Option Awards and Stock Awards Granted in Fiscal Year | (2,021,218) | (2,376,000) | (1,678,713) |
| + Fair Value at Fiscal Year-End of Outstanding and Unvested Option Awards and Stock Awards Granted in Fiscal Year | 2,625,972 | 700,815 | 1,620,274 |
| + Change in Fair Value of Outstanding and Unvested Option Awards and Stock Awards Granted in Prior Fiscal Years | 114,460 | (936,801) | (81,245) |
| + Fair Value at Vesting of Option Awards and Stock Awards Granted in Fiscal Year That Vested During Fiscal Year | - | - | - |
| + Change in Fair Value as of Vesting Date of Option Awards and Stock Awards Granted in Prior Fiscal Years For Which Applicable Vesting Conditions Were Satisfied During Fiscal Year | (360,829) | 121,836 | (71,181) |
| - Fair Value as of Prior Fiscal Year-End of Option Awards and Stock Awards Granted in Prior Fiscal Years That Failed to Meet Applicable Vesting Conditions During Fiscal Year | - | - | - |
| CAP Amount | \$ 3,077,346 | \$ 534,653 | \$ 2,071,551 |

⁽⁶⁾ Sage TSR for the common stock of the Company assumes the investment of \$100 in our common stock on the last trading day before the earliest fiscal year in the above table through and including the end of the fiscal year for which TSR is shown.

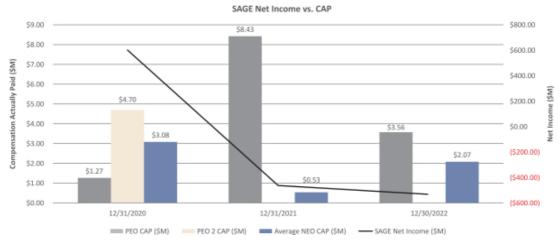
- (7) The Peer Group TSR is the total stockholder return for the Nasdaq Biotechnology Index.
- (8) The net income shown for the fiscal year 2020 includes an up-front amount and payment for shares of our common stock received from Biogen in connection with the effectiveness of the Biogen Collaboration and License Agreement (as defined in the section entitled "Certain Relationships and Related Party Transactions" below).
- (9) The following table lists the four categories of non-financial performance measures that, in our assessment, represent the most important performance measures we use to link the CAP Amounts for our PEO and Other NEOs for 2022 (our most recently completed fiscal year) to company performance. While we utilize these and other performance-based measures to align our executive officer compensation with our performance and potential value creation for our stockholders, including in connection with their annual bonus opportunity and in setting performance-based milestones for PSUs, as more fully described in Compensation Discussion and Analysis in this Proxy Statement, we do not currently use financial performance measures in setting compensation for our executive officers, and accordingly, a company-selected measure based on financial performance is not included in the pay versus performance table above.

| Strategic Regulatory Milestones |
|---|
| Pre-Launch and Launch Readiness Goals |
| Research and Development Pipeline Goals |
| Hiring and Workforce Development Goals |

The following chart depicts the relationship of CAP Amounts for our PEOs and Other NEOs as compared to the cumulative TSR of our common stock and the Peer Group TSR, as well as the relationship between our TSR and the Peer Group TSR, over the past three years.

For each of the fiscal years shown, we believe the CAP Amounts for our PEOs and Other NEOs were generally consistent with the changes in our TSR and the Peer Group TSR, reflecting the pay-for-performance approach applied by our Compensation Committee. However, the CAP Amounts are not correlated to net income in conformity with generally accepted accounting principles, as that is not one of the performance measures we use to link compensation actually paid to our executives to company performance.

The following chart depicts the relationship of CAP Amounts for our PEOs and Other NEOs as compared to net income over the past three years. The net income shown for the fiscal year 2020 includes an up-front amount and payment for shares of our common stock received from Biogen in connection with the effectiveness of the Biogen Collaboration and License Agreement (as defined in the section entitled "Certain Relationships and Related Party Transactions" below).



SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information regarding beneficial ownership of our common stock as of March 31, 2023, for each person known to us to be the beneficial owner of more than five percent of our outstanding common stock; each of our named executive officers; each of our directors and nominees; and all of our directors and executive officers as a group.

Beneficial ownership is determined in accordance with the rules of the SEC and generally includes voting or investment power with respect to securities. Except as noted by footnote, and subject to community property laws where applicable, we believe, based on the information provided to us, that the persons and entities named in the table below have sole voting and investment power with respect to all shares of our common stock shown as beneficially owned by them.

The table lists applicable percentage ownership based on 59,762,001 shares of our common stock outstanding as of March 31, 2023. The number of shares beneficially owned includes shares of our common stock that each person has the right to acquire, through option exercise or otherwise, within 60 days of March 31, 2023. These shares shall be deemed to be outstanding for the purpose of computing the percentage of outstanding shares of our common stock owned by such person but shall not be deemed to be outstanding for the purpose of computing the percentage of outstanding shares of our common stock owned by any other person.

| | Shares Ben Owne | | |
|--|--------------------|---------|--|
| Name and Address for Beneficial Owner(1) | Number | Percent | |
| 5% Stockholders | | | |
| Entities Affiliated with Fidelity Investments(2) | 6,551,490 | 11.0% | |
| Biogen MA Inc.(3) | 6,241,473 | 10.4% | |
| Wellington Management Company LLP(4) | 5,516,136 | 9.2% | |
| BlackRock, Inc.(5) | 4,910,142 | 8.2% | |
| The Vanguard Group, Inc.(6) | 4,885,552 | 8.2% | |
| BB Biotech AG(7) | 3,100,278 | 5.2% | |
| Named Executive Officers and Directors | | | |
| Barry E. Greene(8) | 321,637 | * | |
| Named Executive Officers | | | |
| Kimi Iguchi(9) | 244,608 | * | |
| Christopher Benecchi(10) | 27,572 | * | |
| Anne Marie Cook(11) | 257,165 | * | |
| Laura Gault, M.D., Ph.D. | _ | * | |
| Other Directors | | | |
| Steven Paul, M.D.(12) | 598,054 | * | |
| Kevin P. Starr(13) | 402,503 | * | |
| James M. Frates(14) | 77,998 | * | |
| Michael F. Cola(15) | 102,677 | * | |
| Geno Germano(16) | 75,761 | * | |
| Elizabeth Barrett(17) | 52,963 | * | |
| George Golumbeski, Ph.D.(18) | 61,446 | * | |
| Jessica J. Federer(19) | 1,105 | * | |
| Jeffrey M. Jonas, M.D.(20) | 744,165 | 1.2% | |
| All directors and executive officers as a group (15 persons)(21) | 3,278,261 | 5.3% | |

^{*} Indicates beneficial ownership of less than one percent.

- (1) Unless otherwise indicated, the address for each beneficial owner is c/o Sage Therapeutics, Inc., 215 First Street, Cambridge, Massachusetts 02142.
- (2) The address for FMR LLC is 245 Summer Street, Boston, MA 02210. A wholly owned subsidiary of FMR LLC and an investment adviser registered under Section 203 of the Investment Advisers Act of 1940, FMR LLC is the beneficial owner of shares of our common stock as a result of acting as investment adviser to various investment companies, or Fidelity Funds, registered under Section 8 of the Investment Company Act of 1940. Based solely on a Schedule 13G filed by FMR LLC on February 9, 2023, consists of 6,551,490 shares of our common stock held by entities affiliated with FMR LLC. FMR LLC has sole power to vote or to direct the vote of 6,549,375 shares. FMR LLC has sole power to dispose or to direct the disposition of 6,551,490 shares. Abigail P. Johnson is a Director, the Chairman and the Chief Executive Officer of FMR LLC. Members of the Johnson family, including Abigail P. Johnson, are the predominant owners, directly or through trusts, of Series B voting common shares of FMR LLC, representing 49% of the voting power of FMR LLC. The Johnson family group and all other Series B stockholders have entered into a stockholders' voting agreement under which all Series B voting common shares will be voted in accordance with the majority vote of Series B voting common shares. Accordingly, through their ownership of voting common shares and the execution of the stockholders' voting agreement, members of the Johnson family may be deemed, under the Investment Company Act of 1940, to form a controlling group with respect to FMR LLC. Neither FMR LLC nor Abigail P. Johnson has the sole power to vote or direct the voting of the shares owned directly by the Fidelity Funds advised by Fidelity Management & Research Company, which power resides with the Fidelity Funds' Boards of Trustees. Fidelity Management & Research Company carries out the voting of the shares under written guidelines established by the Fidelity Funds' Boards of Trustees.
- (3) The address for Biogen Inc. and Biogen MA Inc. is 225 Binney Street, Cambridge, MA 02142. Consists of 6,241,473 shares held by Biogen MA Inc. Biogen MA Inc. and Biogen Inc. share voting and dispositive power with respect to all of the shares of our common stock reported as beneficially owned by them.
- (4) The address for Wellington Management Company LLP, or Wellington, is 280 Congress St., Boston MA 02210. Based solely on a Schedule 13G filed on February 6, 2023, Wellington may be deemed to beneficially own the indicated shares and has shared dispositive power over 5,516,136 shares and shared voting power over 5,008,249 shares. The shares are owned of record by clients of the Wellington Investment Advisers. Wellington Investment Advisors Holdings LLP controls directly, or indirectly through Wellington Management Global Holdings, Ltd., the Wellington Investment Advisers. Wellington Investment Advisors Holdings LLP is owned by Wellington Group Holdings LLP. Wellington Group Holdings LLP is owned by Wellington Management Group LLP.
- (5) The address for BlackRock, Inc. is 55 East 52nd Street, New York, NY 10055. Based solely on a Schedule 13G filed on February 3, 2023, consists of 4,910,142 shares of our common stock with sole dispositive power and 4,790,080 shares of our common stock with sole voting power.
- (6) The address for The Vanguard Group, or Vanguard, is 100 Vanguard Blvd., Malvern, PA 19355. Based solely on a Schedule 13G filed on February 9, 2023, consists of 4,885,552 shares of our common stock beneficially owned by Vanguard and its subsidiaries. Vanguard Asset Management, Limited, Vanguard Fiduciary Trust Company, Vanguard Global Advisors, LLC, Vanguard Group (Ireland) Limited, Vanguard Investments Australia Ltd, Vanguard Investments Canada, Inc., Vanguard Investments Hong Kong Limited, and Vanguard Investments UK, Limited are subsidiaries of Vanguard and have shared power to vote or direct to vote of 40,766 shares, sole power to dispose of or to direct the disposition of 4,791,002 shares, and shared power to dispose or to direct the disposition of 94,550 shares.
- (7) The address for BB Biotech AG is Schwertstrasse 6, CH-8200 Schaffhausen, Switzerland. The address for Biotech Target N.V. is Ara Hill Top Building, Unit A-5, Pletterijweg Oost 1, Curaçao. Based solely on a Schedule 13G filed by BB Biotech AG, or BB Biotech, on behalf of its wholly-owned subsidiary, Biotech Target N.V., or Biotech Target, on February 17, 2023, BB Biotech and Biotech Target have shared voting power and shared dispositive power over 3,100,278 shares of our common stock.
- (8) Consists of 46,940 shares of our common stock owned directly, and 274,697 shares of our common stock subject to options exercisable within 60 days of March 31, 2023.
- (9) Consists of 65,560 shares of our common stock owned directly, and 179,048 shares of our common stock subject to options exercisable within 60 days of March 31, 2023.
- (10) Consists of 5,260 shares of our common stock owned directly, and 22,312 shares of our common stock subject to options exercisable within 60 days of March 31, 2023.
- (11) Consists of 10,498 shares of our common stock owned directly, and 246,667 shares of our common stock subject to options exercisable within 60 days of March 31, 2023.

- Consists of: 68,788 shares of our common stock held by the Steven M. Paul GRAT VIII trust, a grantor retained annuity trust established for the benefit of Dr. Paul and his adult children; 125,550 shares of our common stock held by the Steven M. Paul GRAT IX trust, a grantor retained annuity trust established for the benefit of Dr. Paul and his adult children; 78,539 shares of our common stock held by the Steven M. Paul GRAT X trust, a grantor retained annuity trust established for the benefit of Dr. Paul and his adult children; 30,600 shares held by the Steven M. Paul Family 2018 Delaware Irrevocable Trust FBO Morgan McGill, of which the trustee is an independent institution and for which Dr. Paul acts as investment adviser; 30,600 shares held by the Steven M. Paul Family 2018 Delaware Irrevocable Trust FBO Jordan Fisch, of which the trustee is an independent institution and for which Dr. Paul acts as investment adviser; 30,600 shares held by the Steven M. Paul Family 2018 Delaware Irrevocable Trust FBO Aaron Paul, of which the trustee is an independent institution and for which Dr. Paul acts as investment adviser; 30,600 shares held by the Steven M. Paul Family 2018 Delaware Irrevocable Trust FBO Austin Paul, of which the trustee is an independent institution and for which Dr. Paul acts as investment adviser; 119,295 shares held by the Steven M. Paul Family 2019 Delaware Irrevocable Trust FBO Jann Paul, of which the trustee is an independent institution and for which Dr. Paul acts as investment adviser; and 83,482 shares of our common stock subject to options exercisable within 60 days of March 31, 2023. Dr. Paul disclaims beneficial ownership of the shares held in trust.
- (13) Consists of 320,659 shares of our common stock owned by Mr. Starr directly, and 81,844 shares of our common stock subject to options exercisable within 60 days of March 31, 2023.
- (14) Consists of 1,035 shares of our common stock held by the James M. Frates GRAT U/A Dtd 03/17/2017 trust; 905 shares held by the John A. Frates 2013 Irrevocable Trust, dated December 19, 2013; 905 shares held by the Peter E. Frates 2013 Irrevocable Trust, dated December 19, 2013; and 75,153 shares of our common stock subject to options exercisable within 60 days of March 31, 2023. Mr. Frates disclaims beneficial ownership of the shares held in each of the trusts, except to the extent of his pecuniary interest therein, if any.
- (15) Consists of 102,677 shares of our common stock subject to options exercisable within 60 days of March 31, 2023.
- (16) Consists of 75,761 shares of our common stock subject to options exercisable within 60 days of March 31, 2023.
- (17) Consists of 52,963 shares of our common stock subject to options exercisable within 60 days of March 31, 2023.
- (18) Consists of 8,000 shares of our common stock owned directly, and 53,446 shares of our common stock subject to options exercisable within 60 days of March 31, 2023.
- (19) Consists of 1,105 shares of our common stock subject to options exercisable within 60 days of March 31, 2023.
- (20) Consists of 121,981 shares of our common stock owned directly, and 622,184 shares of our common stock subject to options exercisable within 60 days of March 31, 2023.
- (21) See footnotes 8 through 20 above. Consists of 1,241,868 shares of our common stock owned directly, and 2,036,393 shares of our common stock subject to options exercisable within 60 days of March 31, 2023, including shares of our common stock beneficially owned by our Chief Scientific Officer, Albert Robichaud, Ph.D.

EXECUTIVE OFFICERS

The following table identifies our executive officers and sets forth their current positions at Sage and their ages as of April 17, 2023.

| Name | Age | Position |
|----------------------------|-----|---|
| Barry E. Greene | 59 | Chief Executive Officer and Director |
| Kimi Iguchi | 60 | Chief Financial Officer |
| Christopher Benecchi | 51 | Chief Business Officer |
| Anne Marie Cook | 61 | Senior Vice President, General Counsel, Secretary |
| Albert J. Robichaud, Ph.D. | 62 | Chief Scientific Officer |
| Laura Gault, M.D., Ph.D. | 54 | Chief Medical Officer |

Biographical information for each of our executive officers, as of April 17, 2023, other than Mr. Greene is set forth below. Biographical information for Mr. Greene can be found above under the heading "Biographical Information Concerning Our Board of Directors."

Kimi Iguchi. Ms. Iguchi has served as our Chief Financial Officer since March 2013. From 2011 to 2013, Ms. Iguchi provided financial consulting services to various companies. From 2008 to 2011, Ms. Iguchi served as the Chief Operating Officer, North America for Santhera Pharmaceuticals Holding AG. From 2004 to 2007, Ms. Iguchi held the role of Vice President of Finance at Cyberkinetics Neurotechnology Systems, Inc. From 1998 to 2004, Ms. Iguchi was the Senior Director of Financial Reporting and Analysis at Millennium Pharmaceuticals, Inc., and from 1996 to 1998 was the Senior Manager, External Reporting at Biogen, Inc. From 1987 to 1995, Ms. Iguchi worked as a business assurance manager at PricewaterhouseCoopers LLP. Ms. Iguchi received her B.A. in chemistry from Drew University and an M.B.A. from Northeastern University.

Christopher Benecchi. Mr. Benecchi has served as our Chief Business Officer since June 2022, and previously served as our Chief Commercial Officer from September 2021 to June 2022. Prior to joining us, he served as Vice President, Global Head of Commercial Excellence at Alexion Pharmaceuticals, Inc. from August 2019 to September 2021. Previously, Mr. Benecchi served in multiple commercial roles of increasing responsibility at UCB, Inc. from August 2011 to August 2019, including most recently as Global Launch Head, Commercial and Medical Affairs, Immunology from January 2018 to August 2019; Global Commercial Strategy Lead, Immunology from June 2016 to December 2017; and Global Marketing Head from September 2014 to May 2016. He began his career in sales at Johnson & Johnson and subsequently held sales leadership and senior marketing roles at Takeda Pharmaceutical Company and Acorda Therapeutics, Inc. Mr. Benecchi received his B.A. from Colby College and his M.B.A. from Duke University.

Anne Marie Cook. Ms. Cook has served as our Senior Vice President, General Counsel since September 2015 and corporate Secretary since December 2015. Prior to joining us, she served from December 2011 to September 2015 as Senior Vice President, General Counsel of Aegerion Pharmaceuticals, Inc. From December 2008 to December 2011, Ms. Cook was a partner at the law firm Choate Hall & Stewart LLP. From April 2007 to December 2008, Ms. Cook was a Principal at the law firm Miller Canfield P.L.C. From September 2005 until April 2007, Ms. Cook served as General Counsel and Senior Vice President, Business and Corporate Development, and Secretary of ViaCell, Inc. Prior to joining ViaCell, Ms. Cook spent thirteen years at Biogen Idec Inc., most recently as Vice President, Chief Corporate Counsel. Ms. Cook holds a B.S. degree from Tufts University and a J.D. degree from the University of Notre Dame Law School.

Albert J. Robichaud, Ph.D. Dr. Robichaud has served as our Chief Scientific Officer since November 2011. From 2010 to 2011, he was Vice President of Chemistry and Pharmacokinetic Sciences at Lundbeck, Inc., a pharmaceutical company. From 2002 to 2010, Dr. Robichaud was Senior Director and Head of the Neuroscience Discovery Chemistry department of Wyeth Research. Dr. Robichaud earned a B.S. in chemistry from Rensselaer Polytechnic Institute, a Ph.D. in organic chemistry from the University of California, Irvine and was an American Chemical Society postdoctoral fellow at Colorado State University.

Laura Gault, M.D., Ph.D. Dr. Gault has served as our Chief Medical Officer since October 2022. Prior to joining us, she served as Vice President, Neurology Clinical Development at Alexion Pharmaceuticals, Inc. from March 2019 to October 2022. Previously, Dr. Gault served as Vice President, Neurology Clinical Development at Vertex Pharmaceuticals from August 2017 to March 2019 and served in a variety of roles of increasing responsibility at AbbVie Inc. from September 2007 to August 2017. Dr. Gault earned a M.D. and a Ph.D. in Neuroscience from Case Western Reserve University and a B.S. in Behavioral Neuroscience from the University of Pittsburgh. Dr. Gault completed an internship in Pediatrics, followed by residency in Adult Psychiatry and fellowship in Child and Adolescent Psychiatry at Yale University.

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CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

Except as described below, there have been no transactions or series of similar transactions since January 1, 2022, other than compensation arrangements, entered into to which we were a party or will be a party, in which:

- the amounts involved exceeded or will exceed \$120,000; and
- any of our directors, executive officers or holders of more than 5% of our capital stock, or any member of the immediate family of any
 of the foregoing persons or any affiliated entity, had or will have a direct or indirect material interest.

Collaboration Agreement with Biogen

In December 2020, we entered into a collaboration and license agreement, or the Biogen Collaboration and License Agreement, with Biogen for the development, manufacture and commercialization of products containing zuranolone and SAGE-324 in the U.S. and granting Biogen rights to develop and commercialize those products in the rest of the world other than Japan, Taiwan and South Korea in the case of zuranolone. In connection with our entry into the Biogen Collaboration and License Agreement, we also entered a stock purchase agreement with BIMA, pursuant to which we issued and sold \$650.0 million of our common stock to BIMA. As a result, Biogen is the beneficial owner of more than 5% of our voting securities. During the fiscal year ended December 31, 2022, we recognized approximately \$75.7 million in net reimbursement from Biogen related to our and Biogen's performance under the Biogen Collaboration and License Agreement.

Indemnification of Officers and Directors

Our Bylaws provide that we will indemnify our directors and officers to the fullest extent permitted by Delaware law. We have also entered into, or intend to enter into, separate indemnification agreements with our directors and executive officers, which may be broader in scope than the specific indemnification provisions contained in the DGCL.

Related Person Transactions Policy and Procedures

We adopted a written Related Person Transactions Policy effective in July 2014 that requires all transactions between us and any director, executive officer, holder of 5% or more of any class of our capital stock or any member of the immediate family of, or entities affiliated with, any of them, or any other related persons (as defined in Item 404 of Regulation S-K) or their affiliates, in which the amount involved is equal to or greater than \$120,000, be approved in advance by our Audit Committee. Any request for such a transaction must first be presented to our Audit Committee for review, consideration and approval. In the event a director has an interest in the proposed transaction, the director must recuse himself or herself from the deliberations and approval. In approving or rejecting any such proposal, our Audit Committee is to consider the relevant facts and circumstances available and deemed relevant to the Audit Committee, including, but not limited to, the extent of the related party's interest in the transaction, and whether the transaction is on terms no less favorable to us than terms we could have generally obtained from an unaffiliated third party under the same or similar circumstances.

COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION

During 2022, each of Michael F. Cola, James M. Frates and Elizabeth Barrett served on our Compensation Committee, which is chaired by Michael F. Cola. None of the members of our Compensation Committee has at any time during the last three years been an officer or employee of the Company or had any relationship requiring disclosure under Item 404 of Regulation S-K. None of our current executive officers currently serves, or in the past fiscal year has served, as a member of the Board of Directors or Compensation Committee of any entity that has one or more executive officers serving on our Board of Directors or Compensation Committee.

Audit Committee Report

The Audit Committee operates under a written charter approved by the Board of Directors, which provides that its responsibilities include the oversight of the quality of our financial reports and other financial information and our compliance with legal and regulatory requirements; the appointment, compensation, and oversight of our independent registered public accounting firm, PricewaterhouseCoopers LLP, including reviewing their independence; reviewing and approving the planned scope of our annual audit; reviewing and pre-approving any non-audit services that may be performed by PricewaterhouseCoopers LLP; the oversight of our internal audit function; reviewing with management and our independent registered public accounting firm the adequacy of our internal controls over financial reporting; and reviewing our critical accounting policies and estimates and the application of accounting principles generally accepted in the United States of America. The Audit Committee oversees our financial reporting process on behalf of the Board of Directors. Management is responsible for our internal controls, financial reporting process, and compliance with laws and regulations and ethical business standards. PricewaterhouseCoopers LLP is responsible for performing an independent audit of our consolidated financial statements in accordance with the standards of the Public Company Accounting Oversight Board (United States), or the PCAOB. The Audit Committee's main responsibility is to monitor and oversee this process.

The Audit Committee reviewed and discussed our audited financial statements for the fiscal year ended December 31, 2022 with management. The Audit Committee discussed with PricewaterhouseCoopers LLP the matters required to be discussed by PCAOB Auditing Standard No. 1301 and the SEC. The Audit Committee has received the written disclosures and the letter from the independent registered public accounting firm required by applicable requirements of the PCAOB regarding the independent registered public accounting firm's communications with the Audit Committee concerning independence, and has discussed with the independent registered public accounting firm the independent registered public accounting firm's independence.

The Audit Committee considered any fees paid to PricewaterhouseCoopers LLP for the provision of non-audit related services and does not believe that these fees compromise PricewaterhouseCoopers LLP's independence in performing the audit.

Based on the review and discussions referred to above, the Audit Committee recommended to the Board of Directors that such audited financial statements be included in our Annual Report on Form 10-K for the year ended December 31, 2022, for filing with the SEC.

The information contained in this report shall not be deemed to be (1) "soliciting material," (2) "filed" with the SEC, (3) subject to Regulations 14A or 14C of the Exchange Act, or (4) subject to the liabilities of Section 18 of the Exchange Act. This report shall not be deemed incorporated by reference into any of our other filings under the Exchange Act or the Securities Act, except to the extent that we specifically incorporate it by reference into such filing.

By the Audit Committee of the Board of Directors of Sage Therapeutics, Inc.,

James M. Frates, Chair Elizabeth Barrett Michael F. Cola

HOUSEHOLDING OF PROXY MATERIALS

Some banks, brokers, and other nominee record holders may be participating in the practice of "householding" proxy statements and annual reports. This means that only one copy of the Notice of Internet Availability of Proxy Materials, Proxy Statement, and Annual Report to Stockholders for the year ended December 31, 2022, as applicable, is being delivered to multiple stockholders sharing an address, unless they have given contrary instructions. We will promptly deliver a separate copy of any of these documents to you if you call us at (617) 949-4256 or write to us at 215 First Street, Cambridge, Massachusetts 02142, Attention: Investor Relations. If you want to receive separate copies of the proxy statement or annual report to stockholders in the future, or if you are receiving multiple copies and would like to receive only one copy per household, you should contact your bank, broker or other nominee record holder, or you may contact us at the above address and phone number.

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SAGE THERAPEUTICS, INC.

2014 EMPLOYEE STOCK PURCHASE PLAN, AS AMENDED

The purpose of the Sage Therapeutics, Inc. 2014 Employee Stock Purchase Plan ("the Plan") is to provide eligible employees of Sage Therapeutics, Inc. (the "Company") and each Designated Subsidiary (as defined in Section 11) with opportunities to purchase shares of the Company's common stock, par value \$0.0001 per share (the "Common Stock"). 1,082,000 shares of Common Stock in the aggregate have been approved and reserved for this purpose. The Plan is intended to constitute an "employee stock purchase plan" within the meaning of Section 423(b) of the Internal Revenue Code of 1986, as amended (the "Code"), and shall be interpreted in accordance with that intent.

- 1. <u>Administration</u>. The Plan will be administered by the person or persons (the "Administrator") appointed by the Company's Board of Directors (the "Board") for such purpose. The Administrator has authority at any time to: (i) adopt, alter and repeal such rules, guidelines and practices for the administration of the Plan and for its own acts and proceedings as it shall deem advisable; (ii) interpret the terms and provisions of the Plan; (iii) make all determinations it deems advisable for the administration of the Plan; (iv) decide all disputes arising in connection with the Plan; and (v) otherwise supervise the administration of the Plan. All interpretations and decisions of the Administrator shall be binding on all persons, including the Company and the Participants. No member of the Board or individual exercising administrative authority with respect to the Plan shall be liable for any action or determination made in good faith with respect to the Plan or any option granted hereunder.
- 2. <u>Offerings</u>. The Company will make one or more offerings to eligible employees to purchase Common Stock under the Plan ("Offerings"). Unless otherwise determined by the Administrator, an Offering will begin on the first business day occurring on or after each January 1st and July 1st and will end on the last business day occurring on or before the following June 30th and December 31st, respectively. The Administrator may, in its discretion, designate a different period for any Offering, <u>provided</u> that no Offering shall exceed 12 months in duration or overlap any other Offering.
- 3. <u>Eligibility</u>. All individuals classified as employees on the payroll records of the Company and each Designated Subsidiary are eligible to participate in any one or more of the Offerings under the Plan, <u>provided</u> that (i) as of the first day of the applicable Offering (the "Offering Date") they are customarily employed by the Company or a Designated Subsidiary for more than 20 hours a week, and (ii) they were employees of the Company on the first day of the month preceding the Offering Date (i.e., employment status determined as of June 1 for the Offering commencing on July 1 and determined as of December 1 for the Offering commencing on January 1). Notwithstanding any other provision herein, individuals who are not contemporaneously classified as employees of the Company or a Designated Subsidiary's payroll system are not considered to be eligible employees of the Company or any Designated Subsidiary and shall not be eligible to participate in the Plan. In the event any such individuals are reclassified as employees of the Company or a Designated Subsidiary for any purpose, including, without limitation, common law or statutory employees, by any action of any third party, including, without limitation, any government agency, or as a result of any private lawsuit, action or administrative proceeding, such individuals shall, notwithstanding such reclassification, remain ineligible for participation. Notwithstanding the foregoing, the exclusive means for individuals who are not contemporaneously classified as employees of the Company or a Designated Subsidiary on the Company's or Designated Subsidiary's payroll system to become eligible to participate in this Plan is through an amendment to this Plan, duly executed by the Company, which specifically renders such individuals eligible to participate herein.

4. Participation.

- (a) <u>Participants in Offering</u>. An eligible employee who is not a Participant on any Offering Date may participate in such Offering by submitting an enrollment form to his or her appropriate payroll location at least 15 business days before the Offering Date (or by such other deadline as shall be established by the Administrator for the Offering).
- (b) Enrollment. The enrollment form will (a) state a whole percentage to be deducted from an eligible employee's Compensation (as defined in Section 11) per pay period, (b) authorize the purchase of Common Stock in each Offering in accordance with the terms of the Plan and (c) specify the exact name or names in which shares of

Common Stock purchased for such individual are to be issued pursuant to Section 10. An employee who does not enroll in accordance with these procedures will be deemed to have waived the right to participate. Unless a Participant files a new enrollment form or withdraws from the Plan, such Participant's deductions and purchases will continue at the same percentage of Compensation for future Offerings, provided he or she remains eligible.

(c) Notwithstanding the foregoing, participation in the Plan will neither be permitted nor be denied contrary to the requirements of the Code.

- 5. <u>Employee Contributions</u>. Each eligible employee may authorize payroll deductions at a minimum of one percent (1%) up to a maximum of ten percent (10%) of such employee's Compensation for each pay period. The Company will maintain book accounts showing the amount of payroll deductions made by each Participant for each Offering. No interest will accrue or be paid on payroll deductions.
- 6. <u>Deduction Changes</u>. Except as may be determined by the Administrator in advance of an Offering, a Participant may not increase or decrease his or her payroll deduction during any Offering, but may increase or decrease his or her payroll deduction with respect to the next Offering (subject to the limitations of Section 5) by filing a new enrollment form at least 15 business days before the next Offering Date (or by such other deadline as shall be established by the Administrator for the Offering). The Administrator may, in advance of any Offering, establish rules permitting a Participant to increase, decrease or terminate his or her payroll deduction during an Offering.
- 7. <u>Withdrawal</u>. A Participant may withdraw from participation in the Plan by delivering a written notice of withdrawal to his or her appropriate payroll location. The Participant's withdrawal will be effective as of the next business day. Following a Participant's withdrawal, the Company will promptly refund such individual's entire account balance under the Plan to him or her (after payment for any Common Stock purchased before the effective date of withdrawal). Partial withdrawals are not permitted. Such an employee may not begin participation again during the remainder of the Offering, but may enroll in a subsequent Offering in accordance with Section 4.
- 8. <u>Grant of Options</u>. On each Offering Date, the Company will grant to each eligible employee who is then a Participant in the Plan an option ("Option") to purchase on the last day of such Offering (the "Exercise Date"), at the Option Price (as defined herein) for, the lowest of (a) a number of shares of Common Stock determined by dividing such Participant's accumulated payroll deductions on such Exercise Date by the Option Price (as defined herein), (b) 2,500 shares; or (c) such other lesser maximum number of shares as shall have been established by the Administrator in advance of the Offering; <u>provided</u>, <u>however</u>, that such Option shall be subject to the limitations set forth below. Each Participant's Option shall be exercisable only to the extent of such Participant's accumulated payroll deductions on the Exercise Date. The purchase price for each share purchased under each Option (the "Option Price") will be eighty-five percent (85%) of the Fair Market Value of the Common Stock on the Offering Date or the Exercise Date, whichever is less.

Notwithstanding the foregoing, no Participant may be granted an Option hereunder if such Participant, immediately after the Option was granted, would be treated as owning stock possessing five percent (5%) or more of the total combined voting power or value of all classes of stock of the Company or any Parent or Subsidiary (as defined in Section 11). For purposes of the preceding sentence, the attribution rules of Section 424(d) of the Code shall apply in determining the stock ownership of a Participant, and all stock which the Participant has a contractual right to purchase shall be treated as stock owned by the Participant. In addition, no Participant may be granted an Option which permits his or her rights to purchase stock under the Plan, and any other employee stock purchase plan of the Company and its Parents and Subsidiaries, to accrue at a rate which exceeds \$25,000 of the fair market value of such stock (determined on the Option grant date or dates) for each calendar year in which the Option is outstanding at any time. The purpose of the limitation in the preceding sentence is to comply with Section 423(b)(8) of the Code and shall be applied taking Options into account in the order in which they were granted.

9. Exercise of Option and Purchase of Shares. Each employee who continues to be a Participant in the Plan on the Exercise Date shall be deemed to have exercised his or her Option on such date and shall acquire from the Company such number of whole shares of Common Stock reserved for the purpose of the Plan as his or her accumulated payroll deductions on such date will purchase at the Option Price, subject to any other limitations contained in the Plan. Any amount remaining in a Participant's account at the end of an Offering solely by reason of the inability to purchase a fractional share will be carried forward to the next Offering; any other balance remaining in a Participant's account at the end of an Offering will be refunded to the Participant promptly.

10. <u>Issuance of Certificates</u>. Certificates representing shares of Common Stock purchased under the Plan may be issued only in the name of the employee, in the name of the employee and another person of legal age as joint tenants with rights of survivorship, or in the name of a broker authorized by the employee to be his, her or their, nominee for such purpose.

11. Definitions.

The term "Compensation" means the amount of base pay, prior to salary reduction pursuant to Sections 125, 132(f) or 401(k) of the Code, but excluding overtime, commissions, incentive or bonus awards, allowances and reimbursements for expenses such as relocation allowances or travel expenses, income or gains on the exercise of Company stock options, and similar items.

The term "Designated Subsidiary" means any present or future Subsidiary (as defined below) that has been designated by the Board to participate in the Plan. The Board may so designate any Subsidiary, or revoke any such designation, at any time and from time to time, either before or after the Plan is approved by the stockholders.

The term "Fair Market Value of the Common Stock" on any given date means the fair market value of the Common Stock determined in good faith by the Administrator; provided, however, that if the Common Stock is admitted to quotation on the NASDAQ Capital Market, the NASDAQ Global Market, the NASDAQ Global Select Market or another national securities exchange, the determination shall be made by reference to the closing price on such date. If there is no closing price for such date, the determination shall be made by reference to the last date preceding such date for which there is a closing price.

The term "Initial Public Offering" means the consummation of the first underwritten firm commitment public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended, covering the offer and sale by the Company of its Common Stock.

The term "Parent" means a "parent corporation" with respect to the Company, as defined in Section 424(e) of the Code.

The term "Participant" means an individual who is eligible as determined in Section 3 and who has complied with the provisions of Section 4.

The term "Subsidiary" means a "subsidiary corporation" with respect to the Company, as defined in Section 424(f) of the Code.

- 12. Rights on Termination of Employment. If a Participant's employment terminates for any reason before the Exercise Date for any Offering, no payroll deduction will be taken from any pay due and owing to the Participant and the balance in the Participant's account will be paid to such Participant or, in the case of such Participant's death, to his or her designated beneficiary as if such Participant had withdrawn from the Plan under Section 7. An employee will be deemed to have terminated employment, for this purpose, if the corporation that employs him or her, having been a Designated Subsidiary, ceases to be a Subsidiary, or if the employee is transferred to any corporation other than the Company or a Designated Subsidiary. An employee will not be deemed to have terminated employment for this purpose, if the employee is on an approved leave of absence for military service or sickness or for any other purpose approved by the Company, if the employee's right to reemployment is guaranteed either by a statute or by contract or under the policy pursuant to which the leave of absence was granted or if the Administrator otherwise provides in writing.
- 13. <u>Special Rules</u>. Notwithstanding anything herein to the contrary, the Administrator may adopt special rules applicable to the employees of a particular Designated Subsidiary, whenever the Administrator determines that such rules are necessary or appropriate for the implementation of the Plan in a jurisdiction where such Designated Subsidiary has employees; provided that such rules are consistent with the requirements of Section 423(b) of the Code. Any special rules established pursuant to this Section 13 shall, to the extent possible, result in the employees subject to such rules having substantially the same rights as other Participants in the Plan.
- 14. <u>Optionees Not Stockholders</u>. Neither the granting of an Option to a Participant nor the deductions from his or her pay shall constitute such Participant a holder of the shares of Common Stock covered by an Option under the Plan until such shares have been purchased by and issued to him or her.

- 15. <u>Rights Not Transferable</u>. Rights under the Plan are not transferable by a Participant other than by will or the laws of descent and distribution, and are exercisable during the Participant's lifetime only by the Participant.
- 16. <u>Application of Funds</u>. All funds received or held by the Company under the Plan may be combined with other corporate funds and may be used for any corporate purpose.
- 17. <u>Adjustment in Case of Changes Affecting Common Stock</u>. In the event of a subdivision of outstanding shares of Common Stock, the payment of a dividend in Common Stock or any other change affecting the Common Stock, the number of shares approved for the Plan and the share limitation set forth in Section 8 shall be equitably or proportionately adjusted to give proper effect to such event.
- 18. Amendment of the Plan. The Board may at any time and from time to time amend the Plan in any respect, except that without the approval within 12 months of such Board action by the stockholders, no amendment shall be made increasing the number of shares approved for the Plan or making any other change that would require stockholder approval in order for the Plan, as amended, to qualify as an "employee stock purchase plan" under Section 423(b) of the Code.
- 19. <u>Insufficient Shares</u>. If the total number of shares of Common Stock that would otherwise be purchased on any Exercise Date plus the number of shares purchased under previous Offerings under the Plan exceeds the maximum number of shares issuable under the Plan, the shares then available shall be apportioned among Participants in proportion to the amount of payroll deductions accumulated on behalf of each Participant that would otherwise be used to purchase Common Stock on such Exercise Date.
- 20. <u>Termination of the Plan</u>. The Plan may be terminated at any time by the Board. Upon termination of the Plan, all amounts in the accounts of Participants shall be promptly refunded.
- 21. <u>Governmental Regulations</u>. The Company's obligation to sell and deliver Common Stock under the Plan is subject to obtaining all governmental approvals required in connection with the authorization, issuance, or sale of such stock.
- 22. <u>Governing Law</u>. This Plan and all Options and actions taken thereunder shall be governed by, and construed in accordance with, the laws of the State of Delaware, applied without regard to conflict of law principles.
- 23. <u>Issuance of Shares</u>. Shares may be issued upon exercise of an Option from authorized but unissued Common Stock, from shares held in the treasury of the Company, or from any other proper source.
- 24. <u>Tax Withholding</u>. Participation in the Plan is subject to any minimum required tax withholding on income of the Participant in connection with the Plan. Each Participant agrees, by entering the Plan, that the Company and its Subsidiaries shall have the right to deduct any such taxes from any payment of any kind otherwise due to the Participant, including shares issuable under the Plan.
- 25. <u>Notification Upon Sale of Shares</u>. Each Participant agrees, by entering the Plan, to give the Company prompt notice of any disposition of shares purchased under the Plan where such disposition occurs within two years after the date of grant of the Option pursuant to which such shares were purchased.
- 26. <u>Effective Date and Approval of Shareholders</u>. The Plan shall take effect on the date of the Company's Initial Public Offering, subject to approval by the holders of a majority of the votes cast at a meeting of stockholders at which a quorum is present or by written consent of the stockholders.

DATE APPROVED BY BOARD OF DIRECTORS: July 2, 2014

DATE APPROVED BY STOCKHOLDERS: July 2, 2014

AMENDED BY BOARD OF DIRECTORS: June 7, 2017

AMENDED BY BOARD OF DIRECTORS: December 15, 2021

AMENDED BY STOCKHOLDERS: June 16, 2022

AMENDED BY BOARD OF DIRECTORS: December 16, 2022

AMENDED BY STOCKHOLDERS: [June 15, 2023]

SAGE THERAPEUTICS, INC. 215 FIRST STREET CAMBRIDGE, MA 02142



VOTE BY INTERNET
Before The Meeting - Go to www.proxyvote.com or scan the QR Barcode above

Use the Internet to transmit your voting instructions and for electronic delivery of information. Vote by 11:59 p.m. Eastern Time on June 14, 2023. 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.

 $\textit{During The Meeting} \cdot \mathsf{Go} \ \mathsf{to} \ \underline{\mathsf{www.virtualshareholdermeeting.com/SAGE2023}$

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. There will be no physical location at which stockholders may attend the meeting.

VOTE BY PHONE - 1-800-690-6903
Use any touch-tone telephone to transmit your voting instructions. Vote by 11:59 p.m.
Eastern Time on June 14, 2023. 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 proxided or return it to Vote Processing, c/o Broadridge, 51 Mercedes Way, Edgewood, NY 11717. Proxy cards submitted by mall must be received no later than June 14, 2023.

| | HERAPEUTICS, INC. | For All | Withhold All | For All Except | To withhold authority to vote for any individual nominee(s), mark "For All Except" and write the | | | |
|-------------|---|-------------------------------|---|-------------------------------------|---|-----|---------|-------|
| | Board of Directors recommends you vote FOR ollowing: | | | | number(s) of the nominee(s) on the line below. | | _ | |
| 1. | To elect four directors, Michael F. Cola, Barry E. Greene, Jeffrey M. Jonas, M.D., and Jessica J. Federer, each to sene as a Class III director until the 2026 Annual Meeting of Stockholders and until his or her successor is duly elected and qualified, subject to his or her earlier death, resignation, or removal. | 0 | 0 | 0 | | Eor | Against | Abet |
| | Nominees: | | | | | ror | Against | ALDSI |
| | 01) Michael F. Cola 02) Barry E. Greene 03) Jeffrey M. Jonas, M.D. 04) Jessica J. Federer | | | | To approve an amendment to our 2014 Employee Stock Purchase Plan, as amended, or the 2014 ESPP, to increase the number of shares of our common stock authorized for issuance under the 2014 ESPP by 500,000 shares; and | 0 | 0 | C |
| The prop | Board of Directors recommends you vote FOR osals 2, 3 and 4. | For | Against | Abstain | To transact such other business as may properly come before the meeting or at any and all adjournments or postponements thereof. | | | |
| 2. | To ratify the appointment of PricewaterhouseCoopers LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2023; | 0 | 0 | 0 | укоздиление на внегол. | | | |
| 3. | To hold a non-binding advisory vote to approve the compensation paid to our named executive officers; | 0 | 0 | 0 | | | | |
| admi | e sign exactly as your name(s) appear(s) hereon. When sign nistrator, or other fiduciary, please give full title as such. Joi nally, All holders must sign. If a corporation or partnership, f rtnership name by authorized officer. | ning as it own olease s | attorney, ers should sign in full | executor, each sign corporate | | | | |

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Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting:

The Notice and Proxy Statement and Annual Report are available at www.proxyvote.com.

V10293-P89586

SAGE THERAPEUTICS, INC. Annual Meeting of Stockholders June 15, 2023 8:30 a.m. Eastern Time This proxy is solicited by the Board of Directors

The stockholder(s) hereby appoint(s) Barry Greene, Kimi Iguchi and Anne Marie Cook, or any of them, as proxies, each with the power to appoint their substitute, and hereby authorize(s) them to represent and to vote, as designated on the reverse side of this proxy, all of the shares of common stock of SAGE THERAPEUTICS, INC. that the stockholder(s) is/are entitled to vote at the Annual Meeting of Stockholders to be held at 8:30 a.m. Eastern Time on June 15, 2023, virtually at www.virtualshareholdermeeting.com/SAGE2023, and any adjournments or postponements thereof.

This proxy, when properly executed, will be voted in the manner directed herein. If no such direction is made, this proxy will be voted in accordance with the Board of Directors' recommendations and in the discretion of the proxyholders on any other matter that properly comes before the meeting.

Continued and to be signed on reverse side