

**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.)

Filed by the Registrant

Filed by a Party other than the Registrant

Check the appropriate box:

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

Sage Therapeutics, Inc.
(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement, if other than Registrant)

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

- No fee required.
 - Fee paid previously with preliminary materials.
 - Fee computed on table in exhibit required by Item 25(b) per Exchange Act Rules 14a-6(i)(1) and 0-11.
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**SAGE THERAPEUTICS, INC.
215 FIRST STREET
CAMBRIDGE, MA 02142**

NOTICE OF 2022 ANNUAL MEETING OF STOCKHOLDERS

We invite you to attend the 2022 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 16, 2022 at 9:00 a.m. Eastern Time. You may attend the meeting virtually via the Internet at www.virtualshareholdermeeting.com/SAGE2022, 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 three directors, James M. Frates, George Golumbeski, Ph.D., and Kevin P. Starr, each to serve as a Class II director until the 2025 annual meeting of stockholders and until his successor is duly elected and qualified, subject to his 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, 2022;
3. to hold a non-binding advisory vote to approve the compensation paid to our named executive officers;
4. to hold a non-binding advisory vote to determine the frequency of future stockholder advisory votes on the compensation paid to our named executive officers;
5. 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 300,000 shares; and
6. 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 19, 2022 will be entitled to vote at the Annual Meeting and any adjournment or postponement thereof. A complete list of registered stockholders will be available to stockholders of record during the Annual Meeting for examination at www.virtualshareholdermeeting.com/SAGE2022.

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 28, 2022, 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 2021 Annual Report to Stockholders, or 2021 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 2021 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 28, 2022

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

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 16, 2022
Time: 9:00 a.m. Eastern Time
Location: [Online at www.virtualshareholdermeeting.com/SAGE2022](http://www.virtualshareholdermeeting.com/SAGE2022)
Because the Annual Meeting is being held virtually, you will not be able to attend the Annual Meeting in person.
Record Date: April 19, 2022

How to Vote

By Internet	By telephone	By mailing your Proxy Card	During the meeting
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
<i>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. ET on June 15, 2022.</i>	<i>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. ET on June 15, 2022.</i>	<i>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 15, 2022.</i>	<i>You may vote during the annual meeting by going to www.virtualshareholdermeeting.com/SAGE2022. You will need the 16-digit control number included on your 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.</i>

We recommend that you visit the link for the live webcast at www.virtualshareholdermeeting.com/SAGE2022 and log in with your 16-digit control number prior to the start time of 9:00 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.

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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/SAGE2022.
- 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.

	<u>More Information</u>	<u>Board of Directors Recommendation</u>
PROPOSAL 1: Election of Three Class II Directors	Page 13	FOR each nominee
PROPOSAL 2: Ratify the appointment of PricewaterhouseCoopers LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2022	Page 30	FOR
PROPOSAL 3: Advisory vote to approve the compensation paid to our named executive officers	Page 32	FOR
PROPOSAL 4: Advisory vote to determine the frequency of future stockholder advisory votes on the compensation paid to our named executive officers	Page 33	Every Year
PROPOSAL 5: Approve an amendment to the 2014 ESPP to increase the number of shares of our common stock authorized for issuance under the 2014 ESPP by 300,000 shares	Page 34	FOR

Stockholder Engagement and Governance Highlights

Stockholder Engagement

We believe that effective corporate governance includes active and regular engagement with our stockholders. We have undertaken significant, proactive stockholder engagement in 2021 and early 2022, and solicited feedback on our executive compensation, corporate governance and disclosure practices from our largest stockholders representing approximately 63% of our outstanding shares, resulting in meetings in 2021 and early 2022 with stockholders representing approximately 50% of our outstanding shares. By having an open dialogue with stockholders, we seek to gain a better understanding of the practices our stockholders most value. Members of 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, have participated in some of these discussions. The topics discussed included executive compensation, board composition, board commitments, diversity, the classified structure of our Board of Directors, and stockholder voting thresholds for director elections, among other topics. In response to stockholder feedback, our Board of Directors made changes as described further in this Proxy Statement, and we enhanced our disclosures in this Proxy Statement regarding our governance practices, board diversity and skills, and director commitments.

We will 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 our Chief Executive Officer and Chief Innovation Officer, including 100% independence among members of Audit, Compensation and Nominating and Corporate Governance Committees
- We have an independent Chair of our Board of Directors that is separate from the Chief Executive Officer position

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- We have adopted a robust Code of Business Conduct and Ethics, which we refer to as our Values Code, and Corporate Governance Guidelines, each published on our website at <http://investor.sagerx.com/corporate-governance>
- All of our directors attended at least 75% of board and committee meetings in 2021, and on average our directors had a 97% attendance rate
- In 2021, our Nominating and Corporate Governance Committee determined that, in the event any director nominee receives less than majority stockholder support at a Sage annual meeting as an apparent result of his or her number of board memberships, our Board of Directors will evaluate the nominee's other commitments and assess his or her ability to dedicate the requisite time and attention to our business
- In January 2022, we adopted a director recruitment policy that commits to consideration of female and minority candidates for every open board seat (also known as a "Rooney Rule" policy) and joined various organizations in an effort to increase diversity in the director candidate pool and ultimately on our Board of Directors
- We have adopted executive and non-employee director stock ownership guidelines, overseen by our Compensation Committee
- We seek annual advisory approval of executive compensation by our stockholders
- We proactively engage with our stockholders throughout the year
- We adopted a compensation recoupment (clawback) policy in January 2022 with a three-year look-back period
- In 2021 and 2022, we increased the proportion of equity awards with vesting based on achievement of long-term goals in our grants to our executive officers
- We do not have a shareholder rights plan (i.e., no "poison pill")
- Our Board of Directors and each of its committees conduct an annual self-evaluation of the Board of Directors and its committees
- Our independent directors conduct an annual evaluation of our Chief Executive Officer
- We prohibit our insiders, including our executive team, from pledging our securities or purchasing our securities on margin
- We conduct regular executive sessions of independent directors at meetings of our Board of Directors

Nominees for Class II Directors

The names of the nominees for Class II directors and certain information about each as of April 19, 2022, are set forth below.

Name	Positions and Committee Memberships on Sage Board	Current Position and Summary Experience	Director Since	Age	Independent
James M. Frates	<ul style="list-style-type: none"> Chair of the Audit Committee Member of the Compensation Committee 	<ul style="list-style-type: none"> Chief Financial Officer of Amylyx Pharmaceuticals, Inc. Over 25 years of experience in senior level finance positions 	2014	54	Yes
George Golumbeski, Ph.D.	<ul style="list-style-type: none"> Member of the Nominating and Corporate Governance Committee 	<ul style="list-style-type: none"> Partner at DROIA Ventures and previously President of GRAIL, Inc. Over 30 years of experience in the biotechnology industry, including significant transactional and business development experience 	2019	65	Yes
Kevin P. Starr	<ul style="list-style-type: none"> Chair of the Board of Directors 	<ul style="list-style-type: none"> Co-founder and Partner at Third Rock Ventures Over 25 years of experience building and operating biotech companies 	2011	59	Yes

We believe Mr. Frates' qualifications to sit on our Board of Directors include his leadership experience, financial expertise, business judgment and industry knowledge. 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. 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.

Executive Compensation Highlights

We have a pay-for-performance compensation philosophy, and as a result, 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 2021, including the following, which factored into our performance assessment for the purposes of funding our annual bonus incentive plan, or the Annual Bonus Incentive Plan, for 2021 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 2021 Business Highlights

- Announced plans to submit a new drug application, or NDA, for zuranolone to the U.S. Food and Drug Administration, or FDA, in the second half of 2022 seeking approval of zuranolone in major depressive disorder, or MDD, and an associated NDA seeking approval of zuranolone for postpartum depression, or PPD, in the first half of 2023, pending the completion of and results from the SKYLARK Study, a Phase 3 placebo-controlled clinical trial evaluating a two-week course of zuranolone 50 mg in women with PPD, with additional short-term follow-up
- Pivotal Phase 3 WATERFALL Study evaluating zuranolone 50 mg in adults with MDD met its primary endpoint
- Reported positive topline 12-month data in the open-label SHORELINE Study, designed to evaluate the safety, tolerability and need for repeat dosing of zuranolone 50 mg in adults with MDD for up to one year
- Achieved multiple development milestones in 2021 evaluating SAGE-718 for the treatment of cognitive impairment associated with Huntington’s disease, Parkinson’s disease and Alzheimer’s disease, including receipt of Fast Track Designation for SAGE-718 in the treatment of Huntington’s disease
- KINETIC Study evaluating SAGE-324 for the treatment of adults with essential tremor achieved its primary endpoint
- Initiated a Phase 2b placebo-controlled dose-ranging clinical trial of SAGE-324 in patients with essential tremor in late 2021, known as the KINETIC 2 Study

2021 and Early 2022 Compensation Highlights

- Continued focus on our pay-for-performance philosophy to help align the financial interests of our executive officers with the interests of our stockholders
- Instituted a maximum payout cap of 200% of the bonus target for purposes of Annual Bonus Incentive Plan payouts, effective commencing with 2022 compensation
- Adopted a compensation recoupment (clawback) policy 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
- We increased the proportion of annual equity awards granted as performance restricted stock units, or PSUs

SAGE THERAPEUTICS, INC.
PROXY STATEMENT
FOR THE 2022 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 28, 2022, 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 2021 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 2021 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 for most stockholders, we are providing access to our proxy materials 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 28, 2022. 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 2021 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 2022 Annual Meeting of Stockholders, this Proxy Statement and our 2021 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 16, 2022**

This Proxy Statement and our 2021 Annual Report are available for viewing, printing and downloading at <http://www.proxyvote.com>.

Where and when is the Annual Meeting?

The Annual Meeting will be held on Thursday, June 16, 2022 at 9:00 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/SAGE2022. The webcast will begin at 9:00 a.m. Eastern Time.

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- 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.

We recommend that you visit the link for the live webcast at www.virtualshareholdermeeting.com/SAGE2022 and log in with your 16-digit control number prior to the start time of 9:00 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 19, 2022.

How many votes can be cast by all stockholders?

There were 59,066,149 shares of our common stock, par value \$0.0001 per share, outstanding on April 19, 2022, 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 19, 2022.

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/SAGE2022. 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 15, 2022.

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- **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 15, 2022.
- **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 15, 2022.
- **During the Annual Meeting.** You may vote during the Annual Meeting by going to www.virtualshareholdermeeting.com/SAGE2022. 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 8:45 a.m. Eastern Time on June 16, 2022. 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/SAGE2022.

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 15, 2022.

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- Sign a new proxy and submit it as instructed above. Only your latest dated proxy, to be received no later than June 15, 2022, 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 Bylaws. 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, 4 and 5 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 \$15,000 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, 2023 and March 18, 2023. If the next annual meeting of the stockholders is scheduled to take place before May 17, 2023, or after August 15, 2023, 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, any stockholder proposal intended to be included in the proxy statement for the next annual meeting of our stockholders in 2023 must satisfy the requirements of Rule 14a-8 under the Securities Exchange Act of 1934, as amended, or the Exchange Act, and be received not later than December 29, 2022. 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 five proposals requiring stockholder action, which are as follows:

- **Proposal 1**, which requests the election of three Class II 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, 2022;
- **Proposal 3**, which requests a non-binding advisory vote to approve the compensation of our named executive officers as disclosed in this Proxy Statement;
- **Proposal 4**, which requests a non-binding advisory vote to determine the frequency of future stockholder advisory votes on the compensation paid to our named executive officers; and
- **Proposal 5**, 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 300,000 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 II 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 II members: James M. Frates, George Golumbeski, Ph.D., and Kevin P. Starr. If elected, each nominee will serve as a director until the annual meeting of stockholders in 2025 and until his successor is duly elected and qualified, or until his 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 II director nominees to the Board of Directors. Each of the nominees has indicated his willingness to serve as a Class II 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 II Directors

The names of the nominees for Class II directors and certain information about each as of April 19, 2022, are set forth below.

Name	Positions and Committee Memberships on Sage Board	Current Position and Summary Experience	Director Since	Age	Independent
James M. Frates	<ul style="list-style-type: none">Chair of the Audit CommitteeMember of the Compensation Committee	<ul style="list-style-type: none">Chief Financial Officer of Amylyx Pharmaceuticals, Inc.Over 25 years of experience in senior level finance positions	2014	54	Yes
George Golumbeski, Ph.D.	<ul style="list-style-type: none">Member of the Nominating and Corporate Governance Committee	<ul style="list-style-type: none">Partner at DROIA Ventures and previously President of GRAIL, Inc.Over 30 years of experience in the biotechnology industry, including significant transactional and business development experience	2019	65	Yes
Kevin P. Starr	<ul style="list-style-type: none">Chair of the Board of Directors	<ul style="list-style-type: none">Co-founder and Partner at Third Rock VenturesOver 25 years of experience building and operating biotech companies	2011	59	Yes

Directors Whose Terms Do Not Expire at the Annual Meeting

The names of and certain information as of April 19, 2022 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	<ul style="list-style-type: none"> Member of the Audit Committee Member of the Compensation Committee 	Class I—2024	2019	59	Yes
Michael F. Cola	<ul style="list-style-type: none"> Chair of the Compensation Committee Member of the Audit Committee 	Class III—2023	2014	62	Yes
Geno Germano	<ul style="list-style-type: none"> Chair of the Nominating and Corporate Governance Committee 	Class I—2024	2016	61	Yes
Barry E. Greene	<ul style="list-style-type: none"> Chief Executive Officer 	Class III—2023	2020	58	No
Jeffrey M. Jonas, M.D.	<ul style="list-style-type: none"> Chief Innovation Officer 	Class III—2023	2013	69	No
Steven Paul, M.D.	<ul style="list-style-type: none"> Member of the Nominating and Corporate Governance Committee 	Class I—2024	2011	71	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 Clariant, Inc., and Chairman of Laureate Pharma, Inc. In addition, Mr. Cola has held senior positions in product development and

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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 has 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. In the past five years, Dr. Golumbeski has served on the boards of directors of Enanta Pharmaceuticals, Inc., Shattuck Labs, Inc. and MorphoSys AG, each a public biotechnology company, and 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.

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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 boards of directors of Karyopharm Therapeutics, Inc., since 2013; Acorda Therapeutics, Inc., since 2007; and BCLS Acquisition Corporation, since 2020. 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.

Jeffrey M. Jonas, M.D. Dr. Jonas has served as our Chief Innovation Officer and as the Chair of the Science and Technology Forum since December 2020 and as a member of our Board of Directors since August 2013. Prior to assuming his role as Chief Innovation Officer, Dr. Jonas had served as our President and Chief Executive Officer since August 2013. 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 serves on the board of directors of Generation Bio Co., a public biotechnology company, Karuna Pharmaceuticals, Inc., or Karuna, a public biopharmaceutical company, and Noema Pharma AG, a private biotechnology company. Dr. Jonas has authored more than 150 books, 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.

Steven Paul, M.D. Dr. Paul has served as a member of our Board of Directors since September 2011. Since August 2018, Dr. Paul has 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 chairing the board of directors of Karuna, he is also currently on the board of directors or is a trustee of several

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organizations, including Voyager and the Foundation for the National Institutes of Health, or NIH, and previously served on the Alnylam board of directors from September 2010 to April 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. In the past five years, Mr. Starr served on the boards of directors of Alnylam (through March 2018) and MyoKardia, Inc. (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.

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 three nominees receiving the most votes 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 II directors nominated by our Board of Directors.

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

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 our 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 nine members and is currently divided into three equal classes with each class consisting of three directors, and each class having 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:

- **Strategic Leadership and Institutional Knowledge.** 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.
- **Protection of Stockholder Value.** With only a 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,

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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.

- ***Accountability to Stockholders.*** 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 2022, all of the companies in our 2022 Peer Group, which is described below under “Executive Officer and Director Compensation—Compensation Discussion and Analysis,” had classified boards. 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. The “withhold” vote allows us to engage with our stockholders to determine the appropriate action. Prior to our 2021 annual meeting, all Sage director nominees had historically received support from at least a majority of stockholders voting in annual elections. In response to stockholder feedback regarding director commitments, our Nominating and Corporate Governance Committee determined that, going forward, in the event that any director nominee receives less than majority stockholder support at a Sage annual meeting as an apparent result of his or her number of other board memberships, our Board of Directors will 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 the majority of companies in our 2022 Peer Group continued to use plurality voting as of the date of our last assessment in March 2022, the 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, or (iii) if the Board of Directors

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recommends that the stockholders approve 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 our 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 2022 Peer Group, all continued to have supermajority voting standards for fundamental corporate changes as of the date of our last assessment in March 2022. The 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 2021. The directors regularly hold executive sessions comprised of only independent directors at meetings of the Board of Directors. During 2021, 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 2021 annual meeting of stockholders.

Our Board of Directors currently has three standing committees: Audit Committee, Compensation Committee, and Nominating and Corporate Governance 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, who 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;

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- 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; 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 2021. 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, who serves as the Chair of the Compensation Committee. During fiscal year 2021, Steven Paul, M.D. served as a member of the Compensation Committee until May 2021, at which time our Board of Directors appointed Ms. Barrett to serve on 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;
- 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

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- 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 five meetings during 2021. 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 Steven Paul, M.D., George Golumbeski, Ph.D., and Geno Germano, who currently serves as the Chair of the Nominating and Corporate Governance Committee. During fiscal year 2021, Michael F. Cola served as a member of the Nominating and Corporate Governance Committee until May 2021, at which time our Board of Directors appointed Dr. Paul to serve on 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;
- 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 2021. The Nominating and Corporate Governance Committee operates pursuant to 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, through the recommendations submitted by stockholders or through such other methods as the Nominating and Corporate Governance Committee deems to be helpful to identify candidates. Once candidates

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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 shall have experience at a strategic or policymaking level in a business, government, non-profit or academic organization of high standing.
- The nominee shall be highly accomplished in his or her respective field, with superior credentials and recognition.
- The nominee shall be well regarded in the community and shall have a long-term reputation for high ethical and moral standards.
- The nominee shall 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 shall 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 our 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 serve or 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.
- **Biopharmaceutical Industry Experience.** 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.
- **Research and Development Experience.** 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.

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- Commercialization Experience. 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.
- Financial Expertise. 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.
- Commitment to our Sage Values Code. We expect all of our directors to have a strong commitment to 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.

Although our Nominating and Corporate Governance Committee does not have a formal policy regarding board diversity, our Nominating and Corporate Governance Committee is committed to recruitment efforts that focus on highly qualified diverse candidates, including candidates who identify as female and/or as racially and ethnically diverse. In response to stockholder feedback, our Board of Directors has adopted a policy of including, and instructing any search firm that it engages in a search for Board candidates to include, women and individuals from underrepresented racial and ethnic groups in the pool from which director candidates are chosen. 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. 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.

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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	Board Skills, Experience and Diversity Matrix (As of April 28, 2022)								
	Barrett	Cola	Frates	Germano	Golumbeski	Greene	Jonas	Paul	Starr
Skills and Experience									
Executive Leadership Experience	•	•	•	•	•	•	•	•	•
Biopharmaceutical Industry Experience	•	•	•	•	•	•	•	•	•
Research and Development Experience		•				•	•	•	
Commercialization Experience	•	•	•	•	•	•	•	•	•
Financial Expertise	•	•	•	•		•	•	•	•
Committed to Sage Values Code	•	•	•	•	•	•	•	•	•
Gender Identity									
Male		•	•	•	•	•	•	•	•
Female	•								
Age									
As of the Record Date	59	62	54	61	65	58	69	71	59
Demographic Background									
African American or Black									
Asian									
Hispanic or Latinx									
White	•	•	•	•	•	•	•	•	•
LGBTQ+									
Independence and Tenure									
Independent	•	•	•	•	•			•	•
Current Nominee for Director			•		•				•
Years of Service on Board	3	7	7	5	3	1	8	10	10









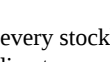
Stockholder Recommendations. In selecting nominees for directors, the Nominating and Corporate Governance Committee will review candidates recommended by stockholders in the same manner and using the same general criteria as candidates recruited by the Nominating and Corporate Governance Committee and/or 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. In 2021 and early 2022, 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 this team solicited feedback from our largest stockholders representing approximately 63% of our outstanding shares, resulting in meetings in 2021 and early 2022 with stockholders representing approximately 50% of our outstanding shares to gain a better understanding of the practices our stockholders value most. The topics discussed included executive compensation, board composition, board commitments, diversity, the classified structure of our Board of Directors, and stockholder voting thresholds for director elections, among other topics.

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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 and from proxy advisory firms. These changes include:

<u>Governance-Related Feedback Received</u>		<u>Action(s) Taken</u>
Implement a director recruitment policy that commits to consideration of female and minority candidates for every open board seat		Adopted a director recruitment policy that commits to consideration of female and minority candidates for every open board seat (also known as a “Rooney Rule” policy) and joined various organizations in an effort to increase diversity in the director candidate pool and ultimately on the Board of Directors
Adopt a policy regarding director commitments		Adopted a policy regarding evaluation of any director nominees who receive less than majority stockholder support in annual elections as an apparent result of the nominee’s number of other board memberships, as described in this Proxy Statement
Provide detail regarding director diversity, skills and experience		Provided detailed disclosure of our board member skills and qualifications, including rationale for valuing these skillsets
Disclose the rationale of the Board of Directors with respect to maintaining certain governance provisions		Added disclosure explaining why our Board of Director believes a classified board structure, supermajority voting standards in our governing documents, and plurality voting for director elections continue to be in the best interests of our Company and our stockholders
Enhance diversity, equity and inclusion, or DE&I, disclosures, including diversity metrics		Added enhanced DE&I metrics, as more fully described in the section entitled “Diversity, Equity and Inclusion” below
<u>Compensation-Related Feedback Received</u>		<u>Action(s) Taken</u>
Increase portion of long-term incentive compensation granted in PSUs, with vesting based on achievement of long-term goals		Increased the proportion of 2022 equity awards granted as PSUs by 36% (33% to 45%), with this increase applying to our Chief Executive Officer and our other executive officers
Continue to enhance compensation governance practices		Adopted a compensation recoupment (clawback) policy in January 2022 with a three-year look-back period
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, effective commencing with 2022 compensation
Enhance disclosures on performance measures and when Compensation Committee applies discretion		Provided additional disclosure regarding our Annual Bonus Incentive Plan funding decision and strategic milestone goals used as PSU vesting triggers

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

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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.

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. Our Chief Financial Officer provides reports to the Audit Committee and is responsible for identifying, evaluating and implementing financial risk management controls and methodologies to address any identified risks. In connection with its risk management role, our Audit Committee meets privately with representatives from our independent registered public accounting firm, and privately with our Chief Financial Officer. The Board of Directors evaluates from time to time the processes by which our exposure to risk is assessed and managed by management. In addition, the Audit Committee assesses our financial controls, legal and compliance risks, business and operational risks, and cybersecurity risks. As part of this oversight, 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 such risk exposures, and provides periodic updates to the full Board of Directors.

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 launched our SageCitizen Social Impact Initiative, a corporate social impact effort that activates and amplifies Sage's long-term commitment to:

- **People** – 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.
- **Patients** – Partnering 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 several shared goals: reducing stigma, improving patient care, and enhancing access to medicines and services for people impacted by brain health disorders.
- **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. We provide green transportation incentives to our employees, reduce our waste stream by composting, recycling and eliminating plastic, and educate our employees about how to integrate green best practices at home.
- **Community** – We engage with organizations supporting families, children and individuals who are facing hardship or social isolation that can lead to depression. Our community philanthropy focus areas are essential service organizations that supplement daily necessities from food to clothing to temporary shelter and social connection programs that increase connectivity for those separated from loved ones, letting them know they are not alone and that someone cares.

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:** Foster a diverse and inclusive culture that enables a sense of belonging and innovative thinking.
- **Talent:** Recruit and develop diverse, high-performing individuals and teams.
- **External:** Identify and partner with diverse community organizations and vendors to increase diversity in our ecosystem.
- **Patients:** Continue to grow and nurture long-term and transparent partnerships to ensure diverse voices are represented.

Our commitment to DE&I is reflected in our employee snapshot as of year-end 2021 below:

Employee Snapshot

<u>Employee Data</u>	<u>As of December 31, 2021</u>
Leadership Team Members	14
Proportion of leadership team who identified as female and/or from a diverse racial and ethnic group	50%
Total employees	434
Proportion of employees who identified as female	61%
Proportion of employees who identified as racially or ethnically diverse	28%

We are committed to fostering an 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, 2022. 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, 2021 and December 31, 2020.

	Fiscal 2021 (\$)	Fiscal 2020 (\$)
Audit Fees	961,500	1,207,500
Audit-Related Fees	—	25,000
Tax Fees	165,500	82,500
All Other Fees	2,756	2,756
Total	<u>1,129,756</u>	<u>1,317,756</u>

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. In 2020, the audit-related fees were for accounting consultations related to business development activities. There were no such fees incurred in 2021.

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 2020 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.

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All PricewaterhouseCoopers LLP services and fees in the fiscal years ended December 31, 2021 and 2020 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, 2022.

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 2022 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

ADVISORY VOTE ON FREQUENCY OF FUTURE STOCKHOLDER ADVISORY VOTES ON EXECUTIVE OFFICER COMPENSATION

In Proposal 4, we are asking our stockholders to cast a non-binding, advisory vote regarding the frequency of future executive compensation advisory votes. The Dodd-Frank Wall Street Reform and Consumer Protection Act, or the Dodd-Frank Act, and Section 14A of the Exchange Act enable our stockholders, at least once every six years, to indicate their preference regarding how frequently we should solicit a non-binding advisory vote on the compensation of our named executive officers as disclosed in our proxy statement. Currently, the policy of our Board of Directors is to solicit such non-binding, advisory vote every year, which is consistent with the preference indicated by our stockholders at our annual meeting of stockholders held in June 2016. In accordance with the Dodd-Frank Act, we are again asking our stockholders to cast a non-binding, advisory vote to indicate whether they would prefer the opportunity to cast future non-binding, advisory votes every one, two, or three years, or alternatively to abstain from voting.

After careful consideration, our Board of Directors recommends that an advisory vote on executive compensation should continue to be held every year. Our Board of Directors believes that an annual executive compensation advisory vote will facilitate more direct stockholder input on our executive compensation practices, policies and procedures as disclosed in our proxy statement. An annual executive compensation advisory vote is consistent with our policy of reviewing our compensation programs annually, as well as considering input from our stockholders on corporate governance and executive compensation matters. We believe an annual vote would be the best governance practice for us at this time.

Vote Required and Board of Directors' Recommendation

For the reasons discussed above, our Board of Directors recommends that stockholders vote to hold the advisory vote on executive compensation every year. Stockholders are not voting, however, to approve or disapprove of this particular recommendation. The proxy card provides for four choices, and stockholders are entitled to vote on whether the advisory vote on executive compensation should be held every one, two, or three years, or to abstain from voting. The frequency choice that receives the highest number of votes cast will be considered to be the preferred frequency of our stockholders.

As this vote is advisory, it will not be binding upon our Board of Directors and our Board of Directors may decide that it is in the best interest of our stockholders to hold an advisory vote on executive compensation more or less frequently than the frequency receiving the most votes cast by our stockholders. However, the Board of Directors will carefully consider the outcome of this vote when considering the frequency of future advisory votes on executive compensation.

Our Board of Directors recommends that stockholders vote to hold the advisory vote on executive compensation every year.

PROPOSAL 5

AMENDMENT TO THE 2014 EMPLOYEE STOCK PURCHASE PLAN

We adopted the 2014 ESPP in 2014 in connection with our initial public offering, or IPO. A total of 282,000 shares of our common stock were initially authorized and reserved for issuance under the 2014 ESPP. 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 300,000 shares, to a total of 582,000 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 with sufficient shares available for purchase in light of strong employee participation. The Amended 2014 ESPP would constitute the first increase in the number of shares authorized for issuance since the 2014 ESPP’s effectiveness in July 2014, upon the consummation of the IPO.

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 19, 2022, 33,737 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, 2021, as of February 16, 2022, we employed 471 full-time employees, an increase of 173 employees since February 17, 2021. Based on management’s forecasts, the 2014 ESPP will not have any shares available for the offering window beginning on July 1, 2022 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.

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Number of Authorized Shares. If the Amended 2014 ESPP is approved, a total of 582,000 shares of our common stock will be reserved under the Amended 2014 ESPP, of which approximately 333,737 shares would be available for future purchases under the Amended 2014 ESPP based on 33,737 shares remaining available for issuance as of April 19, 2022. 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 a 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.

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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, 2022.

<u>Name and Position</u>	<u>Dollar value (\$)(1)</u>	<u>Number of Shares Purchased</u>
Barry E. Greene, <i>Chief Executive Officer and President</i>	—	—
Kimi Iguchi, <i>Chief Financial Officer and Treasurer</i>	192,836	2,456
Christopher Benecchi, <i>Chief Commercial Officer</i>	—	—
Jeffrey M. Jonas, M.D., <i>Chief Innovation Officer</i>	100,776	1,115
Albert Robichaud, Ph.D., <i>Chief Scientific Officer</i>	184,697	2,435
All current executive officers as a group (6 persons)	512,386	6,685
All directors, not including executive officers, as a group (7 persons)*	—	—
All employees, including all current officers who are not executive officers, as a group (493 persons)	10,069,089	136,120

* 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.

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.

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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 5 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, 2021 are:

- Barry E. Greene, our Chief Executive Officer;
- Kimi Iguchi, our Chief Financial Officer and Treasurer;
- Christopher Benecchi, our Chief Commercial Officer (effective September 13, 2021);
- Jeffrey M. Jonas, M.D., our Chief Innovation Officer; and
- Albert J. Robichaud, Ph.D., our Chief Scientific Officer.

Significant Compensation Actions in 2021

Barry E. Greene was appointed as our Chief Executive Officer on December 15, 2020. Mr. Greene's appointment as Chief Executive Officer was the result of thoughtful succession discussions with our Board of Directors, with the aim of augmenting our executive team with a world-class leader committed to advancing our business to the next stage of growth and commercialization. We determined that Mr. Greene is an ideal candidate to lead this mission because, in addition to having extensive leadership experience in the healthcare and biopharmaceutical industries, he has a proven track record of successfully executing on research and development and commercialization strategies, he has built and grown a multiproduct company, and he is familiar with our business and culture.

Mr. Greene's compensation package was recommended by our Compensation Committee and approved by our Board of Directors following review of benchmark data presented by Aon, our compensation consultant. Our Compensation Committee and our Board of Directors determined that Mr. Greene's compensation package was within the competitive market range, commensurate with Mr. Greene's skills, experience and demonstrated success leading organizations in the biopharmaceutical industry. Although Mr. Greene was appointed in late 2020, Mr. Greene's new hire equity award was granted on January 4, 2021, the first business day of the month following his date of hire, in accordance with our equity grant practice. Mr. Greene's entire new hire equity award was granted in the form of stock options, with 62.5% of the stock options vesting based on the achievement of strategic milestones and 37.5% of the stock options vesting over four years subject to continued service. For Mr. Greene to realize any value from this equity award, the market price of our common stock must appreciate with respect to the closing price of our common stock on the date of the award, which was \$85.82, and in the case of the performance options, the applicable strategic goals must also be achieved. For further discussion and information on these equity awards, please see the section entitled "Long-Term Incentives – Equity Incentive Compensation" below.

In December 2021, the Board of Directors evaluated our 2021 performance against our corporate goals and, considering Mr. Greene's recommendation regarding the level of achievement against each goal and in recognition of the Company's significant accomplishments in 2021, including those associated with the development of zuranolone and our other clinical programs and efforts to expand and accelerate our pipeline, the Board of Directors assessed the Company's corporate goal achievement percentage at 95%. Then, our Board of Directors employed its discretion to add 10% to the Company's corporate goal level of achievement for the innovation and drive demonstrated by the Company in light of a convergence of challenging events, including continued COVID-19 restrictions and related healthcare setting challenges and the significant incremental workload associated with the Company's ongoing development efforts, for a total corporate goal level of

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achievement of 105% for all employees, including the named executive officers. This discretionary increase was applied to Annual Bonus Incentive Plan funding; then, individual performance was assessed to determine individual bonus payments.





To help further drive achievement of strategic milestone goals and in response to stockholder feedback, our Compensation Committee and our Board of Directors increased 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.

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.

Throughout 2021 and early 2022, we sent engagement invitations to our largest stockholders, who collectively represented approximately 63% of our total shares of common stock outstanding. This outreach yielded meetings with stockholders representing ownership of approximately 50% of our outstanding common stock.

At the 2021 annual meeting of stockholders, our annual say-on-pay proposal for our 2020 compensation program received support from 66.8% of the votes cast by our stockholders on the matter. Our Compensation Committee and management team carefully evaluated 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.

<u>Compensation-Related Feedback Received</u>		<u>Action(s) Taken</u>
Increase portion of long-term incentive compensation granted in PSUs, with vesting based on achievement of long-term goals		Increased the proportion of 2022 equity awards granted as PSUs by 36% (33% to 45%), with this increase applying to our Chief Executive Officer and our other executive officers
Continue to enhance compensation governance practices		Adopted a compensation recoupment (clawback) policy in January 2022 with a three-year look-back period
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, effective commencing with 2022 compensation
Enhance disclosures on performance measures and when Compensation Committee applies discretion		Provided additional disclosure regarding our Annual Bonus Incentive Plan funding decision and strategic milestone goals used as PSU vesting triggers

Corporate Background and Highlights for 2021

We are a biopharmaceutical company committed to developing novel therapies with the potential to transform the lives of people with debilitating disorders of the brain. Our first product, ZULRESSO® (brexanolone) CIV injection, is approved in the U.S. for the treatment of PPD in adults. We have a portfolio of other product candidates with a current focus on modulating two critical central nervous system receptor systems, GABA and NMDA. Dysfunction in these systems is implicated in a broad range of brain health disorders. We are currently targeting diseases and disorders of the brain with three key focus areas: depression, neurology and neuropsychiatry.

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 2021, including the following, which factored into our performance assessment for the purposes of funding the Annual Bonus Incentive Plan for 2021 for all employees, including our named executive officers:

- In June 2021, we announced that the WATERFALL Study, a pivotal, Phase 3, double-blind, randomized, placebo-controlled clinical trial evaluating the efficacy and safety of zuranolone 50 mg in adults aged 18 to 64 years with MDD met its primary endpoint.
- In 2021, we reported positive topline 12-month data from both the 30 mg cohort and the 50 mg cohort of the SHORELINE Study, an open-label Phase 3 clinical trial of zuranolone in MDD, which is designed to evaluate the safety, tolerability, and need for repeat dosing of zuranolone in adults for up to one year.
- We progressed 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, for which we announced results in February 2022.
- We announced our plans to submit an NDA for zuranolone to the FDA in the second half of 2022 seeking approval of zuranolone in MDD, with rolling submission planned to begin in early 2022, and plans to submit an associated NDA filing seeking approval of zuranolone for PPD in the first half of 2023, pending the completion and results from the ongoing SKYLARK Study, a Phase 3 placebo-controlled clinical trial evaluating a two-week course of zuranolone 50 mg in women with PPD, with additional short-term follow-up.
- We achieved multiple development milestones in 2021 in our SAGE-718 program, including:
 - In May 2021, we announced results from the first part of a Phase 2a open-label study of SAGE-718 evaluating patients with mild cognitive impairment due to Parkinson's disease, known as the PARADIGM Study. Data from the PARADIGM Study showed that SAGE-718 had a positive impact on multiple domains of cognition, including executive function and learning and memory, while leaving domains altering simple attention or reaction time unaffected. A four-week dosing cohort in the PARADIGM Study is ongoing to gather additional data in the Parkinson's disease patient population.
 - In late 2021, we initiated double-blind placebo-controlled Phase 2 clinical trial of SAGE-718 in patients with Huntington's disease cognitive impairment, known as the DIMENSION Study
 - In December 2021, we reported topline data from a Phase 2a open-label clinical trial of SAGE-718 in patients with mild cognitive impairment and mild dementia due to Alzheimer's disease, known as the LUMINARY Study. Data from the LUMINARY Study showed treatment with SAGE-718 resulted in consistent improvement across multiple tests of executive performance, as well as improvement on key tests of learning and memory.

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- We also advanced our plans to initiate a placebo-controlled Phase 2 clinical trial of SAGE-718 in patients with mild cognitive impairment due to Parkinson's disease in mid-2022 and 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 late 2022.
- In addition, SAGE-718 has been well-tolerated in studies completed to date.
- In April 2021, we announced that our placebo-controlled Phase 2 KINETIC Study evaluating SAGE-324 for the treatment of adults with essential tremor achieved its primary endpoint. We initiated a Phase 2b placebo-controlled dose-ranging clinical trial of SAGE-324 in patients with essential tremor in late 2021, known as the KINETIC 2 Study. We also announced plan to initiate a Phase 2 clinical trial evaluating the safety of SAGE-324 in patients with essential tremor in mid-2022.
- We ended 2021 with cash, cash equivalents and marketable securities of \$1.7 billion, and announced that based on our operating plans, we expect that our cash, cash equivalents and marketable securities, in addition to ongoing collaboration funding, will be sufficient to fund our anticipated level of operations for at least the next 24 months from the filing date of our Annual Report on Form 10-K filed with the SEC on February 24, 2022.

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 returns, 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, and by differentiating awards based on individual performance, which better aligns our compensation program with stockholder interests.

To achieve these objectives, our Compensation Committee regularly reviews our compensation policies and program design overall 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 are still a small company and are heavily focused on the development of our clinical pipeline. Accordingly, our Compensation Committee believes that the following performance factors may best support our future growth:

- key research and development achievements;
- initiation and progress of clinical trials for our product candidates, particularly late-stage programs;
- achievement of regulatory milestones, including regulatory filings for product approvals and 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;

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- new business initiatives, including business development and financings;
- our progress in building out key functions and capabilities to support our next stage of development, 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	<ul style="list-style-type: none">• Fixed cash compensation• Targeted within the market-competitive range, taking into consideration each named executive officer's individual performance, skills, and experience	<ul style="list-style-type: none">• Attracts and rewards high-performing executives through market competitive pay and reflects individual performance
Short-Term Annual Performance-Based Cash Incentives – Variable Pay	<ul style="list-style-type: none">• 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.	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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 and/or commercial milestones.• Any realizable value earned from our equity awards is from stock appreciation and achievement of corporate and strategic milestone goals	<ul style="list-style-type: none">• 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

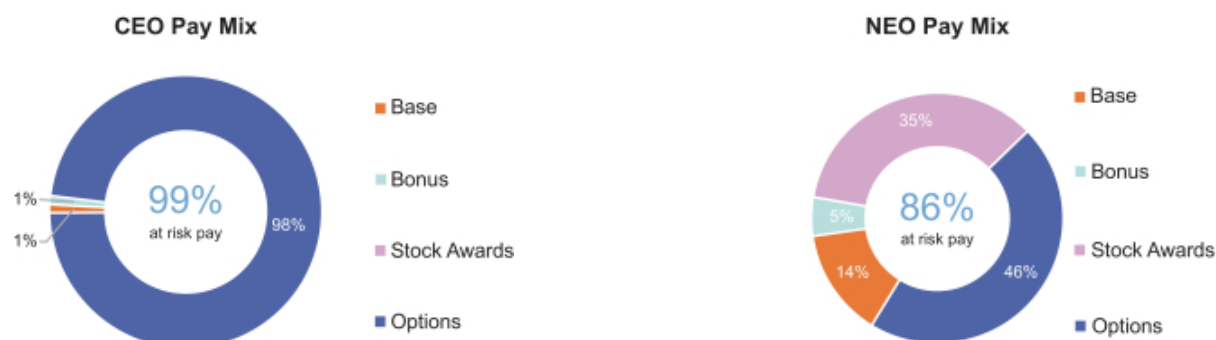
In addition to our compensation elements, the following compensation program features are designed to align our executive team’s interests with stockholder interests and market best practices:

What We Do
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 performance-based 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 prohibit our executive officers from hedging our securities pursuant to our Insider Trading Policy
We prohibit our insiders, including our executive team, from pledging our securities or purchasing 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 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. Over 85% of our target compensation for our Chief Executive Officer and other executive officers is 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 our 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 our senior management, 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 senior 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 senior leadership team, evaluates our annual corporate performance against the prior year’s corporate goals, and taking into account other corporate achievements and developments, 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 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 2021, our Compensation Committee engaged Aon 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. Aon advises the Compensation Committee on all of the principal aspects of executive compensation, including executive new hire compensation arrangements. Aon consultants attend meetings of the Compensation Committee when requested to do so. Aon 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 Aon consistent with Nasdaq listing standards and has concluded that the engagement of Aon 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

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group. Our Compensation Committee considered companies with the following criteria when establishing our peer group for 2021 compensation decisions:

- **Sector** – U.S. public biotechnology/pharmaceutical companies
- **Stage of Development** – focus on early commercial companies
- **Market Capitalization** – ~1/3x to 3x our market capitalization
- **Revenue** – companies with under \$1 billion 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 2021 compensation for our named executive officers, our Compensation Committee relied on the following peer group, prepared by Aon and approved by the Compensation Committee in September 2020, which we call our 2021 Peer Group:

ACADIA Pharmaceuticals Inc.	FibroGen, Inc.
Accelaron Pharma, Inc.	Global Blood Therapeutics, Inc.
Agios Pharmaceuticals, Inc.	Insmmed, Inc.
Alnylam Pharmaceuticals, Inc.	Intercept Pharmaceuticals, Inc.
Biohaven Pharmaceuticals Inc.	Intra-Cellular Therapies, Inc.
bluebird bio, Inc.	Ionis Pharmaceuticals, Inc.
Blueprint Medicines Corporation	Nektar Therapeutics
Deciphera Pharmaceuticals, Inc.	Neurocrine Biosciences, Inc.
Epizyme, Inc.	Sarepta Therapeutics, Inc.
Exelixis, Inc.	Ultragenyx Pharmaceutical Inc.

Changes as compared to the peer group approved for 2020 included removal of Alexion Pharmaceuticals, BioMarin Pharmaceutical, Incyte, and Seattle Genetics, each of which significantly exceeded our market capitalization criteria. Seven companies meeting our criteria—Accelaron, Biohaven, Deciphera, Epizyme, Insmmed, Intercept, and Intra-Cellular—were added to our 2021 Peer Group to ensure an appropriate number of peers for quality benchmarking. At the time the 2021 Peer Group was approved, the median market capitalization of each organization was approximately \$4 billion, median revenue was \$163 million, and median research and development expense was \$290 million. We believe that the compensation practices of our 2021 Peer Group provided us with appropriate compensation reference points for evaluating the compensation of our named executive officers during 2021. 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 2022, our Compensation Committee, with the advice of Aon, examined our 2021 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

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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. Larger, more mature commercial companies such as Ionis, Neurocrine and Sarepta, each with revenue greater than \$500 million and commercial status for greater than five years, were removed from our peer group. Alnylam and Intercept were removed as well, as they exceeded our market capitalization criteria. Two biopharmaceutical companies that met our peer group criteria and focus on the development of therapies for the treatment of diseases of the central nervous system—Alector and Harmony—were added. In September 2021, our Compensation Committee approved the revised peer group, which we refer to as our 2022 Peer Group, consisting of the following companies:

ACADIA Pharmaceuticals Inc.	Exelixis, Inc.
Accelaron Pharma, Inc.	FibroGen, Inc.
Agios Pharmaceuticals, Inc.	Global Blood Therapeutics, Inc.
Alector, Inc.	Harmony Biosciences, Inc.
Biohaven Pharmaceuticals Inc.	Insmed, Inc.
bluebird bio, Inc.	Intra-Cellular Therapies, Inc.
Blueprint Medicines Corporation	Nektar Therapeutics
Deciphera Pharmaceuticals, Inc.	Ultragenyx Pharmaceutical Inc.
Epizyme, 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 2021, 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 2021 Peer Group. The table below sets forth the adjustments made in 2021 to the 2020 base salary, in dollars and as a percentage, for each of our named executive officers other than Mr. Greene, who joined the Company in December 2020, and Mr. Benecchi, who joined the Company in September 2021:

<u>Name</u>	<u>2020 Base Salary (\$)</u>	<u>2021 Base Salary (\$)</u>	<u>Increase/Decrease (%)</u>
Barry E. Greene (1)	735,000	735,000	—
Kimi Iguchi	428,067	443,049	3.5%
Christopher Benecchi (2)	—	440,000	—
Jeffrey M. Jonas, M.D. (3)	700,900	625,000	N/A
Albert Robichaud, Ph.D.	442,184	457,660	3.5%

- (1) Mr. Greene was appointed as our Chief Executive Officer in December 2020 and therefore did not receive any base salary merit increase during 2021.
- (2) Mr. Benecchi was appointed as our Chief Commercial Officer in September 2021 and did not receive any compensation from us prior to his appointment. Based on Mr. Benecchi's experience and an assessment of base salaries of chief commercial officers at our peer and similar companies, his annualized base salary for 2021 was set at \$440,000.

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- (3) Dr. Jonas began his new role as Chief Innovation Officer and Chair of the Science and Technology Forum in December 2020, and in connection with Dr. Jonas' transition from the role of Chief Executive Officer to this new role, the Compensation Committee considered peer group data and internal comparators and adjusted his annual base salary from \$700,900, his salary in connection with his prior role as Chief Executive Officer, to \$625,000.

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 2021.

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

In making its determination regarding bonuses based on performance in 2021 under our annual cash incentive program, our Compensation Committee considered our success against our 2021 corporate goals. The 2021 corporate goals and the weight attributable to each goal were approved by our Board of Directors in the first quarter of 2021. In December 2021, the Board of Directors evaluated our 2021 performance against our corporate goals and, considering Mr. Greene's recommendation regarding the level of achievement against each goal and in recognition of the Company's significant accomplishments in 2021, including those associated with the development of zuranolone and our other clinical programs and efforts to expand and accelerate our pipeline, the Board of Directors assessed the Company's corporate goal achievement percentage at 95%. Then, our Board of Directors employed its discretion to add 10% to the Company's corporate goal level of achievement for the innovation and drive demonstrated by the Company in light of a convergence of challenging events, including continued COVID-19 restrictions and related healthcare setting challenges and the significant incremental workload associated with the Company's ongoing development efforts, for a total corporate goal level of achievement of 105% for all employees, including the named executive officers. This discretionary increase was applied to Annual Bonus Incentive Plan funding; then, individual performance was assessed to determine individual bonus payments. A summary of the corporate goals, relative weightings, and level of achievement is set forth in the table below:

2021 Corporate Goals	Weight	Actual Performance
Drive Paradigm Shift in Brain Disorders starting with Depression	40%	30%
<ul style="list-style-type: none">• Drive ZULRESSO® (brexanolone) uptake in PPD: Achieve target number of treated PPD patients, increase PPD patient access, initiate home infusion study, and develop innovative initiatives to care for moms.• Rapidly advance zuranolone pivotal clinical programs and determine clear filing guidance to enable an NDA filing in 2022. Deliver topline data sufficient to move to next phase of the zuranolone program.		
Expand & Accelerate Our Clinical Pipeline	15%	20%
<ul style="list-style-type: none">• Advance development pipeline.<ul style="list-style-type: none">• Neurology-SAGE-324: Deliver proof of concept data in essential tremor; initiate Phase 2 dose-ranging study in essential tremor.• Neuropsychiatry-SAGE-718: Deliver data from Phase 2 clinical trials in Parkinson's disease and Alzheimer's disease; initiate Phase 2b/Phase 3 placebo-controlled study in Huntington's Disease or another dementia indication.• Develop and manufacture Phase 2/3 formulation for SAGE-324 and SAGE-718 to support planned Phase 2 studies.• Advance Phase 1 studies of SAGE-689 and SAGE-904.• Initiate Phase 2 signal detection study in new indication.• Deliver an optimized portfolio strategy taking into account our partnered assets.		

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2021 Corporate Goals	Weight	Actual Performance
Supercharge our Industry-Leading Research Engine	15%	15%
<ul style="list-style-type: none">Advance research engine capable of delivering one Investigational New Drug, or IND, every 18 months and set stage to expand INDs to one per year.		
Advance our Patient-Focused High Impact Company	20%	25%
<ul style="list-style-type: none">Increase competitive advantage through development of our organization, people and culture and support optimal performance and strong external orientation.Build operating model to prepare for potential commercialization of zuranolone, strengthen organizational capabilities and develop leading “future of work” approach.Create a transparent approach that incorporates enhanced and equitable input from external stakeholders.Continue to advance our culture of integrity, patient safety, quality and compliance, and assess how we uphold our company values.Invest in digital innovations, data, and analytics to support expanded science, commercialization and growth; progress two strategic initiatives/partnerships in digital space.		
Deliver Financial Ambitions and Create Value	10%	5%
<ul style="list-style-type: none">Ensure strong investment discipline by prioritizing pipeline and commercial investment opportunities.<ul style="list-style-type: none">Continue disciplined approach to investing with focus on value creation.Operate within 10% of budgeted/forecasted earnings before interest and taxes.Increase shareholder knowledge of the pipeline and understanding of plans for expansion and acceleration of our portfolio.		
Total Company	100%	95%
Board of Directors’ Discretionary 10% Addition		+10%
Final Corporate Performance Level		<u>105%</u>

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 2022, 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, inclusive of the 10% discretionary addition by our Board of Directors discussed above, and therefore received a bonus equal to 105% of his target bonus for 2021. 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 2021, we completed our process for evaluating and executing trade-off decisions to maximize value, resulting in key strategic decisions and a long-range plan that supports the corporate strategy; processes, systems, and infrastructure to enable the execution of the financial aspects of our collaboration with Biogen MA Inc., or BIMA, and Biogen International GmbH, or, together with BIMA, Biogen. Ms. Iguchi also leveraged technology and built capabilities in the finance department of our organization to improve efficiencies and provide high-quality reporting to facilitate decision making. In addition, Ms. Iguchi helped lead efforts to reduce our real estate footprint, removing underutilized space in a difficult market. Throughout 2021, Ms. Iguchi helped ensure our key narratives were delivered across a broad range of audiences with continued emphasis on brain health leadership and the value of our clinical pipeline beyond zuranolone.

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Mr. Benecchi. Under Mr. Benecchi's leadership following his date of hire in September 2021, we established a cross-functional team with regular engagements to effectively integrate functions on topics of strategic and operational importance, including to: prepare for a potential zuranolone commercial launch in the U.S., if approved; build a launch planning framework to enable readiness for zuranolone, if approved, and potential future product candidate launches; and progress commercialization planning efforts with Biogen related to zuranolone and assess organizational impact through the Joint Steering Committee.

Dr. Jonas. During 2021, Dr. Jonas helped establish and provided leadership as Chair to the Science and Technology Forum of the Board of Directors. Dr. Jonas also helped shape our drug development, regulatory and commercialization strategy, helped prioritize efforts across our drug development programs, and evaluated our portfolio of compounds with an eye to ensuring programs are scientifically, medically and statistically sound.

Dr. Robichaud. In 2021, Dr. Robichaud led our efforts to initiate an IND-enabling program for SAGE-319; completed evaluation and diligence on five early research programs, moving two programs forward; built organizational capabilities to help support our goal of delivering two new high-quality INDs per year by 2023; and expanded research capabilities with the creation of two scientific advisory boards to support new platforms.

The table below shows, for each named executive officer, such executive's target cash incentive award under the 2021 annual cash incentive program as a percentage of the named executive officer's annual base salary in 2021, the target cash incentive award opportunity in dollars for 2021, the 2021 corporate and individual performance-level multipliers, and the actual cash incentive award payments to our named executive officers for 2021 performance, which were paid in February 2022. To calculate each award payment, we multiplied the applicable named executive officer's target cash incentive award opportunity by both the corporate and individual performance-level multipliers.

2021 Performance-Based Annual Cash Incentive Awards

Name	2021 Target Cash Incentive Award (% of 2021 Base Salary)	2021 Target Cash Incentive Award Opportunity (\$)	2021 Annual Bonus Incentive Plan Performance Funding	2021 Individual Performance Assessment	2021 Cash Incentive Award Payment (\$)
Barry E. Greene	65%	477,750	105%	—	501,638
Kimi Iguchi	40%	177,220	105%	90%	167,473
Christopher Benecchi (1)	40%	53,046	105%	100%	55,699
Jeffrey M. Jonas, M.D.	45%	281,250	105%	95%	280,547
Albert Robichaud, Ph.D.	40%	183,064	105%	100%	192,218

(1) Mr. Benecchi became our Chief Commercial Officer in September 2021 and received a prorated cash incentive award based on his hire date for the fiscal year ended December 31, 2021.

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

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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, 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 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.

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 our 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 have 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 are increasing our emphasis on PSUs as compared to historical levels 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 2021 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 several years:

<u>2021 Milestones (1)</u>	<u>% Weighting to Vest (2)</u>
FDA acceptance of next NDA (i.e., next product candidate approved for marketing after ZULRESSO)	30%
Successful launch of next product with a specified number of patients treated	30%
Achievement of a specified amount in cumulative net product revenues, including ZULRESSO and all future products (3)	40%

(1) Used for all PSUs granted to our executive officers in 2021.

(2) The PSUs associated with each milestone will vest at the time the milestone is achieved.

(3) For this purpose, net sales of any products as to which we share profits/losses will be included in cumulative net product revenues even if we do not book the revenue.

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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. In December 2020, the Board of Directors approved the grant of Mr. Greene's new hire award, effective as of January 4, 2021, the first business day of the month following his date of hire, in accordance with our equity grant practice. Mr. Greene's award was determined by the Compensation Committee after reviewing benchmark data presented by Aon. The award was within the competitive market range, commensurate with Mr. Greene's experience and success leading organizations in the biopharmaceutical industry. Consistent with our pay-for-performance philosophy, 62.5% of Mr. Greene's stock options (650,000 shares) were granted at fair market value with vesting based on the achievement of strategic milestone goals and 37.5% (390,000 shares) were granted at fair market value with time-based vesting over four years. The strategic milestone goals include: FDA approval of a second marketed product, achievement of a specific cumulative amount of net product revenue, and FDA approval of a third marketed product. There is no realizable value to these stock options without stock appreciation, and in the case of the performance-based options, without achievement of the specific strategic milestones. Mr. Benecchi was hired in September 2021 and received a new hire equity award consisting of time-based stock options (45,000 shares) and performance-based PSUs (22,500 shares). All other equity awards to our named executive officers were granted as part of our annual equity program.

A summary of the 2021 annual equity awards granted to each of our named executive officers other than Mr. Greene and Mr. Benecchi is shown in the table below:

<u>Name</u>	<u>Stock Options (#)</u>	<u>Performance Restricted Stock Units (PSUs) (#)</u>
Kimi Iguchi	19,000	9,500
Jeffrey M. Jonas, M.D.	34,000	17,000
Albert Robichaud, Ph.D.	22,500	11,250

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

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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. The Company reviews compliance annually, valuing stock at the fair market value on the date of review. We conducted our most recent annual 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.

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, which include the named 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.

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

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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 and our Board of Directors will generally consider various alternatives to preserving the deductibility of compensation payments and benefits to the extent consistent with its compensation goals and 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 our company, and at other times, including during a closed trading window, when a director, officer, or employee may be prohibited from trading otherwise. The first transaction under a 10b5-1 plan may occur no earlier than 60 days after the plan becomes effective. 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

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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.

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, 2021, which was filed with the SEC on February 24, 2022.

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, 2021 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, as amended and restated on September 20, 2018, or the 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, 2021

<u>Plan Category</u>	<u>Number of securities to be issued upon exercise of outstanding options, warrants and rights (#)</u>	<u>Weighted-average exercise price of outstanding options, warrants and rights (\$)</u>	<u>Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in first column)</u>
Equity compensation plans approved by security holders	8,029,720(1)	79.92(2)(3)	3,299,221(4)
Equity compensation plans not approved by security holders(5)	509,817(6)	141.89(7)	2,373,654
Total	8,539,537	84.17	5,672,875

- (1) Consists of an aggregate of 6,783,572 shares of our common stock issuable upon the exercise of outstanding options granted under the 2011 Plan and the 2014 Plan, and 1,246,148 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 1,246,148 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, 2021, there were 3,241,859 shares available for grant under the 2014 Plan and 57,362 shares available for purchase under the 2014 Employee Stock Purchase Plan, of which 23,625 shares were issued on January 5, 2022 pursuant to an offering period that ended on December 31, 2021.
- (5) Consists of the 2016 Inducement Equity Plan.
- (6) Consists of an aggregate of 499,867 shares of our common stock issuable upon the exercise of outstanding options granted under the 2016 Inducement Equity Plan, and 9,950 shares of our common stock subject to outstanding PSUs issued under the 2016 Inducement Equity Plan that will entitle the holder to one share of our common stock for each unit that vests upon the achievement of specified milestones.
- (7) The calculation does not take into account the 9,950 shares of our common stock subject to outstanding PSUs. Such shares will be issued at the time that the PSUs vest, without any cash consideration payable by the grantee for those shares.

Executive Compensation

2021 Summary Compensation Table

The following table sets forth the compensation earned during the fiscal years ended December 31, 2021, December 31, 2020, and December 31, 2019 for our chief executive officer, our former 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.

<u>Name and Principal Position</u>	<u>Year</u>	<u>Salary (\$)</u>	<u>Bonus (\$)</u>	<u>Stock Awards (\$)(1)</u>	<u>Option Awards (\$)(1)</u>	<u>Non-equity incentive plan compensation (\$)(2)</u>	<u>All Other Compensation (\$)(3)</u>	<u>Total (\$)</u>
Barry E. Greene, <i>Chief Executive Officer and President</i>	2021	735,000	—	—	57,615,277(4)	501,638	12,235	58,864,150
	2020	52,897(5)	—	—	771,858(6)	—	1,297	826,052
Kimi Iguchi <i>Chief Financial Officer and Treasurer</i>	2021	443,049	—	781,565	1,021,180	167,473	10,651	2,423,918
	2020	428,067	—	265,388	1,058,096	206,756	10,439	1,968,746
	2019	415,599	—	1,497,485	1,891,725	110,549	10,217	3,925,575
Christopher Benecchi(7) <i>Chief Commercial Officer</i>	2021	133,334	200,000(8)	1,019,025	1,324,058	55,699	314	2,732,430
Jeffrey M. Jonas, M.D. <i>Chief Innovation Officer</i>	2021	625,000(9)	—	1,398,590	1,825,102	280,547	17,463	4,146,702
	2020	697,738	—	758,250	2,714,822	483,621	15,572	4,670,003
	2019	680,520	—	3,940,750	4,977,566	285,800	17,447	9,902,083
Albert Robichaud, Ph.D. <i>Chief Scientific Officer</i>	2021	457,660	—	925,538	1,208,940	192,218	11,806	2,796,162
	2020	442,184	—	303,300	1,173,476	203,405	11,543	2,133,908
	2019	427,231	—	1,497,485	1,891,725	125,606	10,275	3,952,322

- (1) 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 2019, 2020 and 2021, calculated in accordance with the provisions of Financial Accounting Standards Board Accounting Standards Codification Topic 718, “*Compensation—Stock Compensation*”, or 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 24, 2022 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) 2021 amounts represent cash bonus payments made in 2022 for performance in 2021, 2020 amounts represent cash bonus payments made in 2021 for performance in 2020, and 2019 amounts represent cash bonus payments made in 2020 for performance in 2019. Mr. Greene became our Chief Executive Officer in December 2020 and was not eligible to receive a cash incentive award for 2020 performance.
- (3) The amounts reported represent imputed income for company-paid life insurance and 401(k) matching contributions made by us.
- (4) 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.

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- (5) 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.
- (6) 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.
- (7) Mr. Benecchi joined as our Chief Commercial Officer in September 2021. His 2021 salary and non-equity incentive plan compensation has been prorated based on the number of calendar days since Mr. Benecchi joined the company.
- (8) Represents a signing bonus paid to Mr. Benecchi in accordance with his employment agreement.
- (9) Dr. Jonas began his new role as Chief Innovation Officer and Chair of the Science and Technology Forum in December 2020, and in connection with Dr. Jonas’ transition from the role of Chief Executive Officer to this new role, the Compensation Committee considered peer group data and internal comparators and adjusted his annual base salary from \$700,900 to \$625,000.

Grants of Plan-Based Awards

The following table shows information regarding grants of plan-based awards during the fiscal year ended December 31, 2021 to our named executive officers.

Name and Principal Position	Grant Date	Estimated Future Payouts Under Non-Equity Incentive Plan Awards Target \$(1)	Estimated Future Payouts Under Equity Incentive Plan Awards Target (#)	All Other Option Awards: Number of Securities Underlying Options (#)	Exercise or Base Price of Option Awards \$(7)	Grant Date Fair Value of Stock and Option Awards (\$) (8)
Barry E. Greene	—	477,750	—	—	—	—
Chief Executive Officer and President	1/4/21	—	650,000(2)	—	85.82	35,613,999
	1/4/21	—	—	390,000(4)	85.82	22,001,278
Kimi Iguchi	—	177,220	—	—	—	—
Chief Financial Officer and Treasurer	2/10/21	—	—	19,000(4)	82.27	1,021,180
	2/10/21	—	9,500(3)	—	—	781,565
Chris Benecchi(5)	—	53,046	—	—	—	—
Chief Commercial Officer	10/1/21	—	—	45,000(6)	45.29	1,324,058
	10/1/21	—	22,500(3)	—	—	1,019,025
Jeffrey M. Jonas, M.D.	—	281,250	—	—	—	—
Chief Innovation Officer	2/10/21	—	—	34,000(4)	82.27	1,825,102
	2/10/21	—	17,000(3)	—	—	1,398,590
Albert Robichaud, Ph.D.	—	183,064	—	—	—	—
Chief Scientific Officer	2/10/21	—	—	22,500(4)	82.27	1,208,940
	2/10/21	—	11,250(3)	—	—	925,538

- (1) Represents the target amount of each executive’s cash payments under our 2021 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 or maximum amount payable for a specified level of performance under our 2021 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 2021 are provided in the “Non-equity incentive plan compensation” column of the “Summary Compensation Table” above.

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- (2) Represents performance-based stock options granted in 2021 subject to performance-based vesting criteria established by the Board of Directors and described in the footnotes to the “Outstanding Equity Awards at December 31, 2021” table below.
- (3) Represents PSUs granted in 2021 subject to performance-based vesting criteria established by the Compensation Committee and described in the footnotes to the “Outstanding Equity Awards at December 31, 2021” table below.
- (4) Represents options granted in 2021 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.
- (5) Mr. Benecchi joined as our Chief Commercial Officer in September 2021. The estimated future payment under non-equity incentive plan awards amount was prorated based on the number of calendar days since Mr. Benecchi joined the company.
- (6) Represents options granted in 2021 subject to time-based vesting of which 25% will vest 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.
- (7) The exercise price of these stock options was equal to the closing price of our common stock on Nasdaq on the grant date.
- (8) 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 2021, 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, 2021

The following table sets forth information regarding the outstanding equity awards held by each of the named executive officers as of December 31, 2021.

Name	Option Awards					Stock Awards (1)	
	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Options (#)	Option Exercise Price (\$)	Option Expiration Date	Equity Incentive Plan Awards: Number of Unearned Shares, Units or Other Rights that have Not Vested (#)	Market or Payout Value of Unearned Shares, Units or Other Rights that have Not Vested (\$)
Barry E. Greene Chief Executive Officer and President	7,778	12,222(2)	—	59.53	10/1/2030	—	—
	97,500	292,500(3)	—	85.82	1/4/2031	—	—
	—	—	650,000(4)	85.82	1/4/2031	—	—
Kimi Iguchi Chief Financial Officer and Treasurer	13,542	—	—	1.36	1/22/2024	—	—
	20,000	—	—	38.25	1/23/2025	—	—
	31,200	—	—	38.25	1/23/2025	—	—
	15,000	—	—	28.63	2/8/2026	—	—
	22,500	—	—	47.70	2/6/2027	—	—
	14,850	—	—	47.70	2/6/2027	—	—
	15,094	656(5)	—	145.77	4/2/2028	—	—
	13,458	5,542(6)	—	157.63	2/13/2029	—	—
	—	—	—	—	—	3,800(7)	161,652

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Name	Option Awards					Stock Awards (1)	
	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 (\$)
	8,021	9,479(8)	—	68.87	2/12/2030	—	—
	—	—	—	—	—	5,250(9)	223,335
	9,450	—	—	39.87	4/28/2030	—	—
	—	19,000(10)	—	82.27	2/10/2031	—	—
	—	—	—	—	—	9,500(11)	404,130
Christopher Benecchi	—	45,000(12)	—	45.29	10/1/2031	—	—
Chief Commercial Officer	—	—	—	—	—	22,500(13)	957,150
Jeffrey M. Jonas, M.D.	46,587	—	—	0.45	8/12/2023	—	—
Chief Innovation Officer	180,000	—	—	38.25	1/23/2025	—	—
	93,600	—	—	38.25	1/23/2025	—	—
	60,000	—	—	28.63	2/8/2026	—	—
	70,000	—	—	47.70	2/6/2027	—	—
	46,200	—	—	47.70	2/6/2027	—	—
	43,125	1,875(5)	—	145.77	4/2/2028	—	—
	35,417	14,583(6)	—	157.63	2/13/2029	—	—
	—	—	—	—	—	10,000(7)	425,400
	22,917	27,083(8)	—	68.87	2/12/2030	—	—
	—	—	—	—	—	15,000(9)	638,100
	15,385	—	—	39.87	4/28/2030	—	—
	—	34,000(10)	—	82.27	2/10/2031	—	—
	—	—	—	—	—	17,000(11)	723,180
Albert Robichaud, Ph.D.	9,268	—	—	38.25	1/23/2025	—	—
Chief Scientific Officer	23,400	—	—	38.25	1/23/2025	—	—
	21,924	—	—	28.63	2/8/2026	—	—
	20,000	—	—	47.70	2/6/2027	—	—
	13,200	—	—	47.70	2/6/2027	—	—
	15,094	656(5)	—	145.77	4/2/2028	—	—
	13,458	5,542(6)	—	157.63	2/13/2029	—	—
	—	—	—	—	—	3,800(7)	161,652
	9,167	10,833(8)	—	68.87	2/12/2030	—	—
	—	—	—	—	—	6,000(9)	255,240
	9,450	—	—	39.87	4/28/2030	—	—
	—	22,500(10)	—	82.27	2/12/2031	—	—
	—	—	—	—	—	11,250(11)	478,575

- (1) The market value of the PSU awards in this column is based on the closing stock price of \$42.54 per share for our common stock as reported on Nasdaq on December 31, 2021, the last trading day in the fiscal year ended December 31, 2021.
- (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.

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- (5) Represents an option to purchase shares of our common stock granted on April 2, 2018. The shares underlying these options vest as follows: 25% vested on April 2, 2019, with the remainder of the shares vesting in equal monthly installments over the following three years.
- (6) 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.
- (7) Represents PSUs granted on February 13, 2019. 100% of the shares underlying these PSUs vest upon the achievement of a commercial milestone not yet achieved.
- (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. 70% and 30% of the shares underlying these PSUs vest upon the achievement of commercial and regulatory milestones, respectively, 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% will vest 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. 70% and 30% of the shares underlying these PSUs vest upon the achievement of commercial and regulatory milestones, respectively, which milestones have not yet been achieved.

Option Exercises and Stock Vested

The following table shows the number of shares acquired upon exercise of stock options and the vesting of PSUs by each of our named executive officers during the year ended December 31, 2021.

Name	Option Awards		Stock Awards	
	Number of Shares Acquired on Exercise (#)	Value Realized on Exercise (\$) (1)	Number of Shares Acquired on Vesting (#)	Value Realized on Vesting (\$) (2)
Barry E. Greene	—	—	—	—
Kimi Iguchi	11,750	665,323	7,300	358,902
Christopher Benecchi	—	—	—	—
Jeffrey M. Jonas, M.D.	13,800	797,304	20,000	990,900
Albert Robichaud, Ph.D.	—	—	7,800	388,302

- (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.
- (2) Value realized on vesting of PSUs does not represent proceeds from the sale of vested common stock, but is determined by multiplying the number of shares that vested and the closing price of our common stock on Nasdaq on the vesting date.

CEO Pay Ratio

During fiscal year 2021, the annual total compensation for Mr. Greene, our Chief Executive Officer, as discussed below, was \$58,864,150, inclusive of Mr. Greene's new hire equity grant, which had a grant date fair value calculated in accordance with FASB Topic 718 of \$57,615,277 using the Black-Scholes valuation model, and cash compensation. The annual total compensation for our median employee was \$308,210, also 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 191:1. This ratio represents a significant increase from the pay ratio disclosed in our proxy statement filed in 2021 primarily because it reflects the FASB Topic 718 grant date fair value for the new hire equity grant to our Chief Executive Officer in January 2021. Mr. Greene's new hire equity grant was approved by our Board of Directors following review of benchmark data which showed that Mr. Greene's compensation package was within the competitive market range for his skills, experience and demonstrated success leading organizations in the biopharmaceutical industry. The ultimate value of Mr. Greene's 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 per share, which was the closing price of our common stock on Nasdaq on the date of grant. We anticipate that this pay ratio will decrease significantly to levels comparable to what we have reported historically after the one-time impact of Mr. Greene's new hire equity award is no longer a factor for the applicable year in review. For comparison, we reported a pay ratio between our Chief Executive Officer and our then-median employee of 14:1 for fiscal year 2020.

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.

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 receives an annual base salary, which was \$735,000 for 2021, and which is subject to adjustment at the discretion of the Board of Directors. Mr. Greene is also eligible to receive, starting with the 2021 performance year, an annual cash incentive award targeted at 65% of his annual base salary, which is based 100% on the achievement of our corporate goals. In accordance with Mr. Greene’s letter agreement, the Board of Directors granted to Mr. Greene, effective January 4, 2021, an equity award under the 2014 Plan, consisting of (i) an option to purchase 390,000 shares of our common stock subject to time-based vesting, which will vest as to 25% of the shares underlying the option on December 15, 2021 and the remainder of the shares vesting in equal monthly installments through December 15, 2024, and (ii) an option to purchase 650,000 shares of our common stock subject to performance-based vesting, which will vest upon the achievement of certain regulatory and commercial milestones. Each option is subject to the terms and conditions of the 2014 Plan and our standard form of stock option agreement. 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 \$443,049 for 2021. Ms. Iguchi is also eligible for 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. Mr. Benecchi received an annualized base salary of \$440,000 for 2021, which is subject to adjustment at the discretion of the Compensation Committee. Mr. Benecchi also received a sign-on bonus of \$200,000 in September 2021, which is subject to 100% repayment if Mr. Benecchi voluntarily terminates his employment with us within the first 12 months of receiving the sign-on bonus, or 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 for 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.

Jeffrey M. Jonas, M.D. In connection with his appointment as Chief Innovation Officer, we entered into a letter agreement with Dr. Jonas in December 2020, which superseded his original letter agreement with us, entered into in July 2013 in connection with his appointment as Chief Executive Officer in August 2013. Dr. Jonas’ base salary is subject to adjustment at the discretion of the Compensation Committee, and was \$625,000 for 2021. Dr. Jonas is also eligible for an annual cash incentive award targeted at 45% of his annual base salary, payable at the discretion of the Board of Directors; provided that, for 2020, Dr. Jonas was eligible to receive a bonus at his former target of 60% of his former base salary, based solely on corporate goal achievement. Dr. Jonas is eligible to participate in our employee benefit plans, subject to the terms of those plans.

Albert Robichaud, Ph.D. We entered into a letter agreement with Dr. Robichaud in September 2011, and he assumed the role of Chief Scientific Officer in November 2011. Dr. Robichaud’s base salary is subject to adjustment at the discretion of the Compensation Committee, and was \$457,660 for 2021. Dr. Robichaud is also eligible for an annual cash incentive award targeted at 40% of his annual base salary, payable at the discretion of the Compensation Committee. Dr. Robichaud is eligible to participate in our employee benefit plans, subject to the terms of those plans.

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Pension Benefits

None of our named executive officers participate in or have account balances in qualified or nonqualified defined benefit plans sponsored by us as of December 31, 2021.

Nonqualified Deferred Compensation

None of our named executive officers participate in or have account balances in nonqualified defined contribution or nonqualified deferred compensation plans maintained by us as of December 31, 2021.

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 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 Dr. Jonas) 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;

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- 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 our company, not including business travel and short-term assignments; or
- a material breach of the severance agreement by our 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 our company or any successor entity immediately upon completion of the transaction, other than as a result of the acquisition of securities directly from our 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, 2021. The closing price of our stock on Nasdaq as of December 31, 2021, the last trading day of 2021, was \$42.54, 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, 2021 by the difference between the closing price of our stock as of December 31, 2021 and the exercise price for such unvested stock options.

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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, 2021.

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	—	735,000(1)	735,000(1)	735,000(2)
Cash incentive bonus	—	—	—	477,750(3)
Stock options unvested and accelerated	—	—	—	—
Benefits and Perquisites:				
Health care continuation	—	27,786(4)	27,786(4)	27,786(4)
Total	—	762,786	762,786	1,240,536

- (1) 12 months of 2021 base salary continuation.
- (2) 12 months of base salary prior to the termination, payable in a lump sum.
- (3) Target bonus for 2021, 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, 2021.

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	—	443,049(1)	443,049(1)	332,287(2)
Cash incentive bonus	—	—	—	177,220(3)
Stock options unvested and accelerated	—	—	—	18,922(4)
Benefits and Perquisites:				
Health care continuation	—	19,499(5)	19,499(5)	19,499(5)
Total	—	462,548	462,548	547,928

- (1) 12 months of 2021 base salary continuation.
- (2) 9 months of base salary prior to the termination, payable in a lump sum.
- (3) Target bonus for 2021, assuming bonus compensation is unpaid.
- (4) Acceleration of 100% of Ms. Iguchi's then-outstanding and unvested time-based stock options.
- (5) Cash payment equal to the COBRA health and dental insurance premiums for 12 months.

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The following table describes the potential payments and benefits upon employment termination for Christopher Benecchi, our Chief Commercial Officer, as if his employment terminated as of December 31, 2021.

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	—	440,000(1)	440,000(1)	330,000(2)
Cash incentive bonus	—	—	—	53,046(3)
Stock options unvested and accelerated	—	—	—	—
Benefits and Perquisites:				
Health care continuation	—	27,786(4)	27,786(4)	27,786(4)
Total	—	467,786	467,786	410,832

- (1) 12 months of 2021 base salary continuation.
- (2) 9 months of base salary prior to the termination, payable in a lump sum.
- (3) Prorated target bonus for 2021, assuming bonus compensation is unpaid.
- (4) Cash payment equal to the COBRA health and dental insurance premiums for 12 months.

Jeffrey M. Jonas, M.D.

The following table describes the potential payments and benefits upon employment termination for Jeffrey M. Jonas, M.D., our Chief Innovation Officer, as if his employment terminated as of December 31, 2021.

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	—	625,000(1)	625,000(1)	625,000(2)
Cash incentive bonus	—	—	—	281,250(3)
Stock options unvested and accelerated	—	—	—	30,809(4)
Benefits and Perquisites:				
Health care continuation	—	27,786(5)	27,786(5)	27,786(5)
Total	—	652,786	652,786	964,845

- (1) 12 months of 2021 base salary continuation.
- (2) 12 months of base salary prior to the termination, payable in a lump sum.
- (3) Target bonus for 2021, assuming bonus compensation is unpaid.
- (4) Acceleration of 100% of Dr. Jonas's then-outstanding and unvested time-based stock options.
- (5) Cash payment equal to the COBRA health and dental insurance premiums for 12 months.

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Albert Robichaud, Ph.D.

The following table describes the potential payments and benefits upon employment termination for Albert Robichaud, Ph.D., our Chief Scientific Officer, as if his employment terminated as of December 31, 2021.

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	—	457,660(1)	457,660(1)	343,245(2)
Cash incentive bonus	—	—	—	183,064(3)
Stock options unvested and accelerated	—	—	—	18,922(4)
Benefits and Perquisites:	—			
Health care continuation	—	27,786(5)	27,786(5)	27,786(5)
Total		485,446	485,446	573,017

- (1) 12 months of 2021 base salary continuation.
- (2) 9 months of base salary prior to the termination, payable in a lump sum.
- (3) Target bonus for 2021, assuming bonus compensation is unpaid.
- (4) Acceleration of 100% of Dr. Robichaud'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 requires 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 Aon, 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 Aon.

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 our 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 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

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stage of development and given the volatility of the Company's stock price. The Compensation Committee also considers the risks inherent in being a small biotechnology company in the early stages of commercialization while also focused 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 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 2021 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, and Dr. Jonas, our Chief Innovation Officer, receive no compensation for their service as directors. The compensation earned by each of Mr. Greene and Dr. Jonas during 2021 is presented in the "Summary Compensation Table" above. 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 very few of the directors' grants are "in the money," 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)	Total (\$)
Steven Paul, M.D.	50,833	480,860	531,693
Kevin P. Starr	85,000	480,860	565,860
James M. Frates	72,500	480,860	553,360
Michael F. Cola	71,667	480,860	552,527
Geno Germano	51,667	480,860	532,527
Elizabeth Barrett (3)	60,000	480,860	540,860
George Golumbeski, Ph.D. (3)	50,000	480,860	530,860

- (1) The aggregate number of shares subject to stock option awards outstanding as of December 31, 2021 for the non-employee members of the Board of Directors was: Dr. Paul: 81,844, Mr. Starr: 81,844, Mr. Frates: 75,153, Mr. Cola: 102,677, Mr. Germano: 75,761, Ms. Barrett: 50,915, and Dr. Golumbeski: 51,808.
- (2) Amounts for stock option awards represent the aggregate grant date fair value of stock option awards granted to our directors in 2021 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, 2021, 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 2021. 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) 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 2021 and the grant date fair value of the grant was \$48,834 and \$44,404, respectively. The amount indicated in the "Fees Earned or Paid in Cash" column represents the forgone cash retainer for Ms. Barrett and Dr. Golumbeski for 2021 board services.

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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 April 2022.

	Annual Retainer(1)
Board of Directors:	
All non-employee members	\$ 50,000
Additional retainer for Non-Executive Chair of the Board	\$ 40,000
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

(1) The annual retainer for all non-employee members of our Board of Directors was \$45,000 for 2021. All other annual cash retainers remain unchanged following the April 2022 amendment to our non-employee director compensation policy.

Under the non-employee director compensation policy, as amended, 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, commencing in 2022, 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. The Board approved an annual equity grant for non-employee directors in 2022 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 the 2022 Annual Meeting 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 19,894 shares for any new non-employee directors appointed in 2022. 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.

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.

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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 Company will review compliance annually, valuing stock at the fair market value around the date of review. The first review was conducted in the second quarter of 2021 and the next review will occur in the second quarter of 2022.

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 and Dr. Golumbeski made this election in December 2020 for their Board service in 2021, and Ms. Barrett, Dr. Golumbeski and Dr. Paul made this election in December 2021 for their Board service in 2022.

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, 2022, 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 59,066,149 shares of our common stock outstanding as of March 31, 2022. 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, 2022. 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.

<u>Name and Address of Beneficial Owner(1)</u>	<u>Shares Beneficially Owned</u>	
	<u>Number</u>	<u>Percent</u>
5% Stockholders		
Wellington Management Company LLP(2)	7,126,411	12.1%
Biogen MA Inc.(3)	6,241,473	10.6%
Entities Affiliated with Fidelity Investments(4)	5,490,574	9.3%
The Vanguard Group, Inc.(5)	4,578,241	7.8%
BB Biotech AG(6)	3,170,104	5.4%
Named Executive Officers and Directors		
Barry E. Greene(7)	181,121	*
Jeffrey M. Jonas, M.D.(8)	717,010	1.2%
Named Executive Officers		
Kimi Iguchi(9)	224,611	*
Christopher Benecchi	—	*
Albert Robichaud, Ph.D.(10)	289,340	*
Other Directors		
Steven Paul, M.D.(11)	586,416	*
Kevin P. Starr(12)	392,503	*
James M. Frates(13)	67,998	*
Michael F. Cola(14)	92,677	*
Geno Germano(15)	65,761	*
Elizabeth Barrett(16)	40,915	*
George Golumbeski, Ph.D.(17)	41,808	*
All directors and executive officers as a group (13 persons)(18)	2,936,740	4.8%

* 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 of Wellington Management Company LLP, or Wellington, is 280 Congress St., Boston, MA 02210. Based solely on a Schedule 13G filed on February 4, 2022, Wellington may be deemed to beneficially own the indicated shares and has shared dispositive power over 7,126,411 shares and shared

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voting power over 6,297,302 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.

- (3) The address of 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 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, 2022, consists of 5,490,574 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 2,314,549 shares. FMR LLC has sole power to dispose or to direct the disposition of 5,490,574 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.
- (5) The address of The Vanguard Group, or Vanguard, is 100 Vanguard Blvd., Malvern, PA 19355. Based solely on a Schedule 13G filed on February 10, 2022, consists of 4,578,241 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 25,087 shares, sole power to dispose of or to direct the disposition of 4,508,643, and shared power to dispose or to direct the disposition of 69,598 shares.
- (6) 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 11, 2022. BB Biotech and Biotech Target have shared voting power and shared dispositive power over 3,170,104 shares of our common stock.
- (7) Consists of 32,440 shares of our common stock owned directly, and 148,681 shares of our common stock subject to options exercisable within 60 days of March 31, 2022.
- (8) Consists of 84,863 shares of our common stock owned directly, and 632,147 shares of our common stock subject to options exercisable within 60 days of March 31, 2022.
- (9) Consists of 55,600 shares of our common stock owned directly, and 169,011 shares of our common stock subject to options exercisable within 60 days of March 31, 2022.
- (10) Consists of 142,629 shares of our common stock owned directly, and 146,711 shares of our common stock subject to options exercisable within 60 days of March 31, 2022.
- (11) Consists of 1 share held by the Steven Paul Revocable Trust, a family trust of which Dr. Paul person is a trustee; 126,550 shares of our common stock held by the Steven M. Paul GRAT VII trust, a grantor retained annuity trust established for the benefit of Dr. Paul and his adult children; 146,326 shares of our common stock held by the Steven M. Paul GRAT VIII trust; 30,600 shares held by the Steven M. Paul Family 2018

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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 71,844 shares of our common stock subject to options exercisable within 60 days of March 31, 2022. Dr. Paul disclaims beneficial ownership of the shares held in trust.

- (12) Consists of 320,659 shares of our common stock owned by Mr. Starr directly, and 71,844 shares of our common stock subject to options exercisable within 60 days of March 31, 2022.
- (13) 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 65,153 shares of our common stock subject to options exercisable within 60 days of March 31, 2022. 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.
- (14) Consists of 92,677 shares of our common stock subject to options exercisable within 60 days of March 31, 2022.
- (15) Consists of 65,761 shares of our common stock subject to options exercisable within 60 days of March 31, 2022.
- (16) Consists of 40,915 shares of our common stock subject to options exercisable within 60 days of March 31, 2022.
- (17) Consists of 41,808 shares of our common stock subject to options exercisable within 60 days of March 31, 2022.
- (18) See footnotes 7 through 17 above. Consists of 1,161,583 shares of our common stock owned directly, and 1,775,157 shares of our common stock subject to options exercisable within 60 days of March 31, 2022, including shares of our common stock beneficially owned by our Senior Vice President, General Counsel, Anne Marie Cook.

EXECUTIVE OFFICERS

The following table identifies our executive officers and sets forth their current positions at Sage and their ages as of April 19, 2022*.

<u>Name</u>	<u>Age</u>	<u>Position</u>
Barry E. Greene	58	Chief Executive Officer and Director
Kimi Iguchi	59	Chief Financial Officer
Christopher Benecchi	50	Chief Commercial Officer
Anne Marie Cook	60	Senior Vice President, General Counsel, Secretary
Albert J. Robichaud, Ph.D.	61	Chief Scientific Officer

* As of January 1, 2022, Jeffrey M. Jonas, M.D. is no longer classified as an “executive officer” as defined by Rule 3b-7 under the Exchange Act.

Biographical information for each of our executive officers, as of April 19, 2022, other than Mr. Greene is set forth below. Biographical information for Mr. Greene can be found above under the heading “Directors Whose Terms Do Not Expire at the Annual Meeting.”

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.

Chris Benecchi. Mr. Benecchi has served as our Chief Commercial Officer since September 2021. 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.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

Except as described below, there have been no transactions or series of similar transactions since January 1, 2021, 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 accordance with this agreement, we received an upfront payment of \$875.0 million from Biogen. We also have agreed to share equally with Biogen in the costs for development and commercialization of the products and the operating profits and losses arising from net sales in the U.S. We are also eligible to receive tiered royalties from Biogen for net sales in licensed jurisdictions outside the U.S., and are eligible to receive up to \$1.6 billion in potential milestone payments. Any payments made in accordance with these arrangements are pursuant to the terms of the Biogen Collaboration and License Agreement and subject to specified exceptions. 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 in 2020. As a result, BIMA is the beneficial owner of more than 5% of our voting securities.

During the fiscal year ended December 31, 2021, we recognized approximately \$91.1 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, and intend to continue 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 2021, each of Michael F. Cola, Steven Paul, M.D., James M. Frates and Elizabeth Barrett served on our Compensation Committee, which is chaired by Michael F. Cola. Dr. Paul served on our Compensation Committee until May 2021, at which time our Board of Directors appointed Ms. Barrett to serve on the Compensation Committee. 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. Dr. Jonas serves on the Board of Directors of Karuna Pharmaceuticals, Inc., or Karuna, and Steven Paul, M.D. is Chief Executive Officer and Chairman of the Board of Karuna. Except as set forth in the preceding sentence, 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, 2021 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, 2021, 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

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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, 2021, 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.

SAGE THERAPEUTICS, INC.
2014 EMPLOYEE STOCK PURCHASE PLAN

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”). 582,000 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. **Administration.** 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. **Offerings.** 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, provided that no Offering shall exceed 12 months in duration or overlap any other Offering.

3. **Eligibility.** 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, provided 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 for purposes of the Company’s or applicable 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.

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4. Participation.

(a) Participants in Offering. 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. Employee Contributions. 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. Deduction Changes. 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. Withdrawal. 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. Grant of Options. 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; provided, however, 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

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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. Issuance of Certificates. 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.

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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. Special Rules. 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. Optionees Not Stockholders. 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. Rights Not Transferable. 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. Application of Funds. 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. Adjustment in Case of Changes Affecting Common Stock. 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. Insufficient Shares. 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. Termination of the Plan. 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. Governmental Regulations. 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.

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22. Governing Law. 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. Issuance of Shares. 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. Tax Withholding. 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. Notification Upon Sale of Shares. 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. Effective Date and Approval of Shareholders. 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]

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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 15, 2022. Have your proxy card in hand when you access the web site and follow the instructions to obtain your records and to create an electronic voting instruction form.

During The Meeting - Go to www.virtualshareholdermeeting.com/SAGE2022

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 15, 2022. Have your proxy card in hand when you call and then follow the instructions.

VOTE BY MAIL

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

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

D80399-P69408

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

THIS PROXY CARD IS VALID ONLY WHEN SIGNED AND DATED.

SAGE THERAPEUTICS, 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 number(s) of the nominee(s) on the line below.	
The Board of Directors recommends you vote FOR the following:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
1.	To elect three directors, James M. Frates, George Golumbeski, Ph.D., and Kevin P. Starr, each to serve as a Class II director until the 2025 Annual Meeting of Stockholders and until his successor is duly elected and qualified, subject to his earlier death, resignation, or removal;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	
Nominees:						
	01) James M. Frates					
	02) George Golumbeski, Ph.D.					
	03) Kevin P. Starr					
The Board of Directors recommends you vote FOR proposals 2, 3 and 5 and One Year on proposal 4.		For	Against	Abstain		
2.	To ratify the appointment of PricewaterhouseCoopers LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2022;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5.	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 300,000 shares; and
3.	To hold a non-binding advisory vote to approve the compensation paid to our named executive officers;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6.	To transact such other business as may properly come before the meeting or at any and all adjournments or postponements thereof.
		One Year	Two Years	Three Years	Abstain	
4.	To hold a non-binding advisory vote to determine the frequency of future stockholder advisory votes on the compensation paid to our named executive officers;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Please sign exactly as your name(s) appear(s) hereon. When signing as attorney, executor, administrator, or other fiduciary, please give full title as such. Joint owners should each sign personally. All holders must sign. If a corporation or partnership, please sign in full corporate or partnership name by authorized officer.						
<input type="text"/>		<input type="text"/>		<input type="text"/>		<input type="text"/>
Signature [PLEASE SIGN WITHIN BOX]		Date		Signature (Joint Owners)		Date

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.

D80400-P69408

**SAGE THERAPEUTICS, INC.
Annual Meeting of Stockholders
June 16, 2022 9:00 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 9:00 a.m. Eastern Time on June 16, 2022, virtually at www.virtualshareholdermeeting.com/SAGE2022, 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