

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

SCHEDULE 14A

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

Filed by the Registrant

Filed by a Party other than the Registrant

Check the appropriate box:

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

SANGAMO THERAPEUTICS, INC.

(Name of Registrant as Specified In Its Charter)

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

Payment of Filing Fee (Check the appropriate box):

- No fee required.
- Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.
- (1) Title of each class of securities to which the transaction applies:
- (2) Aggregate number of securities to which the transaction applies:
- (3) Per unit price or other underlying value of the transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):
- (4) Proposed maximum aggregate value of the transaction:
- (5) Total fee paid:
- Fee paid previously with preliminary materials.
- Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.
- (1) Amount Previously Paid:
- (2) Form, Schedule or Registration Statement No.:
- (3) Filing Party:
- (4) Date Filed:

PRELIMINARY COPIES — SUBJECT TO COMPLETION

SANGAMO THERAPEUTICS, INC.
NOTICE OF ANNUAL MEETING OF STOCKHOLDERS
To Be Held May 18, 2020

To the Stockholders of Sangamo Therapeutics, Inc.:

You are cordially invited to attend the 2020 Annual Meeting of Stockholders, or the Annual Meeting, of Sangamo Therapeutics, Inc., a Delaware corporation (referred to herein as the Company, Sangamo or we). The meeting will be held on Monday, May 18, 2020, at 9:00 a.m. Pacific Time at the Grand Hyatt at SFO, 55 South McDonnell Road, San Francisco, California 94128*, for the following purposes:

1. to elect the nine nominees for director named in the accompanying proxy statement, or the Proxy Statement, to serve on the Board of Directors until the next annual meeting of stockholders to be held in 2021 and until their successors are duly elected and qualified;
2. to approve, on an advisory basis, the compensation of our named executive officers, or NEOs, as described in the accompanying Proxy Statement;
3. to approve the amendment and restatement of the Sangamo Therapeutics Inc. 2018 Equity Incentive Plan, or the 2018 Plan, to, among other things, increase the aggregate number of shares of our common stock reserved for issuance under the 2018 Plan by 9,900,000 shares;
4. to approve an amendment to the Company's Seventh Amended and Restated Certificate of Incorporation, as amended, or the Restated Certificate, to increase the total number of shares of our common stock authorized for issuance from 160,000,000 shares to 320,000,000 shares;
5. to ratify the appointment of Ernst & Young LLP as our independent registered public accounting firm for the year ending December 31, 2020; and
6. to transact such other business as may properly come before the meeting.

These items of business are more fully described in the Proxy Statement accompanying this Notice.

The record date for the Annual Meeting is March 20, 2020. Only stockholders of record at the close of business on that date, may vote at the Annual Meeting or any adjournment or postponement thereof.

Important Notice Regarding the Availability of Proxy Materials for the Stockholder Meeting to be Held on

May 18, 2020 at 9:00 a.m. Pacific Time at the Grand Hyatt at SFO, 55 South McDonnell Rd, San Francisco, CA 94128

The Proxy Statement, Proxy Card and Annual Report on Form 10-K for 2019 are available at:

www.envisionreports.com/SGMO

Sincerely,

Alexander D. Macrae
President and Chief Executive Officer

Brisbane, California
April 1, 2020

** We intend to hold the Annual Meeting in person. However, we are sensitive to the public health and travel concerns our management, directors and stockholders may have regarding the evolving COVID-19 pandemic and the related protocols that federal, state and local governments may impose. As a result, we may decide to hold the Annual Meeting in a different location or solely by means of remote communication (i.e., a virtual-only meeting). Please retain the control numbers from your proxy card so that you can access the Annual Meeting if it is converted to a virtual-only meeting. Any such change will be announced via a press release that will be filed as additional soliciting material with the Securities and Exchange Commission as soon as reasonably practicable before the Annual Meeting.*

YOUR VOTE IS VERY IMPORTANT

You are cordially invited to attend the Annual Meeting in person. Whether or not you expect to attend the Annual Meeting, please vote over the telephone or the Internet, or, if you receive a paper proxy card by mail, by completing, dating, signing and returning the proxy mailed to you, as promptly as possible in order to ensure your representation at the Annual Meeting. Even if you have voted by proxy, you may still vote in person if you attend the Annual Meeting. Please note, however, that if your shares are held of record by a broker, bank or other nominee and you wish to vote at the Annual Meeting, you must obtain a proxy issued in your name from that record holder.

TABLE OF CONTENTS

	Page
QUESTIONS AND ANSWERS ABOUT THESE PROXY MATERIALS AND VOTING	1
PROPOSAL NO. 1: ELECTION OF DIRECTORS	2
General	2
Nominees	2
Recommendation of the Board of Directors	10
Stockholder Engagement and Responsiveness	10
Board Independence	10
Board Committees and Meetings	10
Leadership Structure of the Board	12
Oversight of Risk Management by the Board	12
Annual Meeting Attendance	13
Communications with the Board of Directors	13
Code of Business Conduct and Ethics	13
Prohibitions on Hedging, Pledging and Speculative Transactions	13
Director Compensation	13
PROPOSAL NO. 2: ADVISORY VOTE ON EXECUTIVE COMPENSATION	17
General	17
Resolution	17
Recommendation of the Board of Directors	18
PROPOSAL NO. 3: AMENDMENT AND RESTATEMENT OF THE 2018 EQUITY INCENTIVE PLAN	19
PROPOSAL NO. 4: AMENDMENT OF THE RESTATED CERTIFICATE TO INCREASE THE TOTAL NUMBER OF AUTHORIZED SHARES OF COMMON STOCK	33
PROPOSAL NO. 5: RATIFICATION OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM	36
Principal Accounting Fees and Services	36
Recommendation of the Board of Directors	36
EXECUTIVE OFFICERS	37
SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT	38
DELINQUENT SECTION 16(a) REPORTS	41
EXECUTIVE COMPENSATION	41
Compensation Discussion and Analysis	41
Executive Summary	41
How We Determine Executive Compensation	43
Design of the Executive Compensation Program and Key Components	45
2019 Compensation Decisions	47
Additional Compensation Information	52
Summary Compensation Table	53
Grants of Plan-Based Awards	55
Employment Agreements and Compensation Arrangements	56
Outstanding Equity Awards at Fiscal Year End	58
Option Exercises and Stock Vested	59
Pension Benefits	59
Nonqualified Deferred Compensation	59
Risk Assessment of Compensation Policies and Practices	59
Employment Contracts and Change in Control Arrangements	59

	Page
CEO Pay Ratio Disclosure	64
COMPENSATION COMMITTEE REPORT	65
EQUITY COMPENSATION PLAN INFORMATION	66
REPORT OF THE AUDIT COMMITTEE OF THE BOARD OF DIRECTORS	67
CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS	68
SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS	68
HOUSEHOLDING OF PROXY MATERIALS	69
OTHER MATTERS	70
APPENDIX A: AMENDED AND RESTATED 2018 EQUITY INCENTIVE PLAN	A-1
APPENDIX B: FORM OF FOURTH CERTIFICATE OF AMENDMENT OF RESTATED CERTIFICATE OF INCORPORATION OF SANGAMO THERAPEUTICS, INC.	B-1

SANGAMO THERAPEUTICS, INC.

7000 Marina Boulevard
Brisbane, California 94005

PROXY STATEMENT
FOR THE ANNUAL MEETING OF STOCKHOLDERS
To Be Held On May 18, 2020

QUESTIONS AND ANSWERS ABOUT THESE PROXY MATERIALS AND VOTING

Why am I receiving these materials?

Our Board of Directors (referred to herein as the Board of Directors or the Board) is soliciting your proxy to vote at the Annual Meeting including at any adjournments or postponements of the Annual Meeting. This Proxy Statement contains important information regarding the Annual Meeting, the proposals on which you are being asked to vote, information you may find useful in determining how to vote and voting procedures.

Why did I receive a notice regarding the availability of proxy materials on the Internet?

Pursuant to rules adopted by the Securities and Exchange Commission, or SEC, we have elected to provide access to our proxy materials over the Internet. Most of our stockholders holding their shares in "street name" will not receive paper copies of our proxy materials (unless requested), and will instead be sent a Notice of Internet Availability of Proxy Materials, or Notice, from the brokerage firms, banks or other agents holding their accounts. All "street name" stockholders receiving a Notice 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 full set of proxy materials in the mail instead of a notice regarding the internet availability of proxy materials?

We are providing stockholders of record who are holding shares in their own name and stockholders who have previously requested a printed set of our proxy materials with paper copies of our proxy materials instead of a Notice. We intend to mail a full set of proxy materials to our stockholders of record on or about April , 2020.

How do I attend the Annual Meeting?

The Annual Meeting will be held on Monday, May 18, 2020 at 9:00 a.m. Pacific Time at the Grand Hyatt at SFO, 55 South McDonnell Road, San Francisco, California 94128. Directions to the Annual Meeting may be found at . Information on how to vote in person at the Annual Meeting is discussed below.

Please note that while we intend to hold the Annual Meeting in person at the location set forth above, we are sensitive to the public health and travel concerns our management, directors and stockholders may have regarding the evolving COVID-19 pandemic and the related protocols that federal, state and local governments may impose. As a result, we may decide to hold the Annual Meeting in a different location or solely by means of remote communication (i.e., a virtual-only meeting). Please retain the control numbers from your proxy card so that you can access the Annual Meeting if it is converted to a virtual-only meeting. Any such change will be announced via a press release that will be filed as additional soliciting material with the SEC as soon as reasonably practicable before the Annual Meeting.

Who can vote at the Annual Meeting?

Only stockholders of record at the close of business on March 20, 2020 will be entitled to vote at the Annual Meeting. On this record date, there were 116,211,355 shares of common stock outstanding and entitled to vote.

Stockholder of Record: Shares Registered in Your Name

If on March 20, 2020 your shares were registered directly in your name with our transfer agent, then you are a stockholder of record. As a stockholder of record, you may vote in person at the meeting or vote by proxy. Whether or not you plan to attend the meeting, we urge you to vote your shares electronically over the Internet or by telephone, or by completing and returning a proxy card, to ensure your vote is counted.

Beneficial Owner: Shares Registered in the Name of a Broker or Bank

If on March 20, 2020 your shares were held, not in your name, but rather in an account at a brokerage firm, bank or other similar organization, then you are the beneficial owner of shares held in “street name” and the Notice is being forwarded to you by that organization. The organization holding your account is considered to be the stockholder of record for purposes of voting at the Annual Meeting. As a beneficial owner, you have the right to direct your broker, bank or other agent regarding how to vote the shares in your account. You are also invited to attend the Annual Meeting. However, because you are not the stockholder of record, you may not vote your shares in person at the meeting unless you request and obtain a valid proxy from your broker, bank or other agent.

What am I voting on?

There are five matters scheduled for a vote:

- election of the nine nominees for director (Proposal No. 1);
- advisory approval of the compensation of our NEOs as disclosed in this Proxy Statement in accordance with SEC rules (Proposal No. 2);
- approval of the amendment and restatement of the 2018 Plan to, among other things, increase the aggregate number of shares of our common stock reserved for issuance under the 2018 Plan by 9,900,000 shares (Proposal No. 3);
- approval of an amendment to the Restated Certificate to increase the total number of shares of our common stock authorized for issuance from 160,000,000 shares to 320,000,000 shares (Proposal No. 4); and
- ratification of the appointment of Ernst & Young LLP as our independent registered public accounting firm for our fiscal year ending December 31, 2020 (Proposal No. 5).

What if another matter is properly brought before the meeting?

The Board knows of no other matters that will be presented for consideration at the Annual Meeting. If any other matters are properly brought before the meeting, it is the intention of the persons named in the accompanying proxy to vote on those matters in accordance with their best judgment.

How do I vote?

For each of the other matters to be voted on at the Annual Meeting, including each nominee for director, you may vote “For” or “Against” or abstain from voting.

The procedures for voting are fairly simple:

Stockholder of Record: Shares Registered in Your Name

If you are a stockholder of record, you may vote in person at the Annual Meeting, vote by proxy over the telephone, vote by proxy through the Internet or vote by proxy using the enclosed proxy card. Whether or not you plan to attend the meeting, we urge you to vote by proxy to ensure your vote is counted. You may still attend and vote at the meeting even if you have already voted by proxy.

- To vote in person, come to the Annual Meeting and we will give you a ballot when you arrive.
- To vote using the proxy card, simply complete, sign and date the enclosed proxy card and return it promptly in the envelope provided. If you return your signed proxy card to us before the Annual Meeting, we will vote your shares as you direct.
- To vote over the telephone, dial toll-free 1-800-652-VOTE (8683) using a touch-tone phone and follow the recorded instructions. You will be asked to provide the company number and control number from the enclosed proxy card. Your telephone vote must be received by 1:00 a.m. Eastern Time on May 18, 2020 to be counted.
- To vote through the Internet, go to <http://www.envisionreports.com/SGMO> to complete an electronic proxy card. You will be asked to provide the company number and control number from the enclosed proxy card. Your Internet vote must be received by 1:00 a.m. Eastern Time on May 18, 2020 to be counted.

Beneficial Owner: Shares Registered in the Name of Broker or Bank

If you are a beneficial owner of shares registered in the name of your broker, bank or other agent, you should have received a Notice containing voting instructions from that organization rather than from us. Simply follow the voting instructions in the Notice to ensure that your vote is counted. Alternatively, you may vote by telephone or over the Internet as instructed by your broker or bank. To vote in person at the Annual Meeting, you must obtain a valid proxy from your broker, bank or other agent. Follow the instructions from your broker, bank or other agent included with these proxy materials, or contact that organization to request a proxy form.

Internet proxy voting may be provided to allow you to vote your shares online, with procedures designed to ensure the authenticity and correctness of your proxy vote instructions. However, please be aware that you must bear any costs associated with your Internet access, such as usage charges from Internet access providers and telephone companies.

How many votes do I have?

On each matter to be voted upon, you have one vote for each share of common stock you owned as of March 20, 2020.

If I am a stockholder of record and I do not vote, or if I return a proxy card or otherwise vote without giving specific voting instructions, what happens?

If you are a stockholder of record and do not vote through the Internet, by telephone, by completing a proxy card or in person at the Annual Meeting, your shares will not be voted.

If you return a signed and dated proxy card or otherwise vote without marking voting selections, your shares will be voted “For” each of the proposals, including for each nominee for director. If any other matter is properly presented at the meeting, your proxyholder (one of the individuals named on your proxy card) will vote your shares using his or her best judgment.

If I am a beneficial owner of shares held in street name and I do not provide my broker or bank with voting instructions, what happens?

If you are a beneficial owner of shares held in street name and you do not instruct your broker, bank or other agent how to vote your shares, your broker, bank or other agent may still be able to vote your shares in its discretion. In this regard, under the rules of the New York Stock Exchange, or NYSE, brokers, banks and other securities intermediaries that are subject to NYSE rules may use their discretion to vote your “uninstructed” shares with respect to matters considered to be “routine” under NYSE rules, but not with respect to “non-routine” matters. In this regard, we have been advised by the NYSE that Proposal Nos. 1, 2 and 3 are considered to be “non-routine” under NYSE rules meaning that your broker may not vote your shares on those proposals in the absence of your voting instructions. We have also been advised by the NYSE that Proposal Nos. 4 and 5 are considered “routine” matters under NYSE rules, meaning that if you do not return voting instructions to your broker by its deadline, your shares may be voted by your broker in its discretion on such proposals.

If you are a beneficial owner of shares held in street name, to ensure your shares are voted in the way you would prefer, you must provide voting instructions to your broker, bank or other agent by the deadline provided in the materials you receive from your broker, bank or other agent.

Who is paying for this proxy solicitation?

We will pay for the entire cost of soliciting proxies. In addition to these proxy materials, our directors and employees may also solicit proxies in person, by telephone, or by other means of communication. Directors and employees will not be paid any additional compensation for soliciting proxies. In addition, we have retained Innisfree M&A Incorporated, a proxy solicitation firm, to assist in the solicitation of proxies for a fee of approximately \$15,000, plus reimbursement of certain costs and expenses. We may also reimburse brokerage firms, banks and other agents for the cost of forwarding proxy materials to beneficial owners.

What does it mean if I receive more than one set of proxy materials, or more than one Notice, or combination thereof?

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

Can I change my vote after submitting my proxy?

Stockholder of Record: Shares Registered in Your Name

Yes. You can revoke your proxy at any time before the final vote at the meeting. If you are the record holder of your shares, you may revoke your proxy in any one of the following ways:

- You may grant a subsequent proxy by telephone or through the Internet.
- You may submit another properly completed proxy card with a later date.
- You may send a timely written notice that you are revoking your proxy to our Secretary at 7000 Marina Boulevard, Brisbane California 94005. Such notice will be considered timely if it is received at the indicated address by the close of business on Friday, May 15, 2020.

- You may attend the Annual Meeting and vote in person. Simply attending the Annual Meeting will not, by itself, revoke your proxy.

Your most current proxy card or telephone or Internet proxy is the one that is counted.

Beneficial Owner: Shares Registered in the Name of Broker or Bank

If your shares are held by your broker, bank or other agent, you should follow the instructions provided by your broker, bank or other agent.

How are votes counted?

Votes will be counted by the inspector of election appointed for the meeting, who will separately count votes “For” and “Against,” abstentions and, if applicable, broker non-votes.

What are “broker non-votes?”

As discussed above, when a beneficial owner of shares held in street name does not give voting instructions to his or her broker, bank or other securities intermediary holding his or her shares as to how to vote on matters deemed to be “non-routine” under NYSE rules, the broker, bank or other such agent cannot vote the shares. These un-voted shares are counted as “broker non-votes.” We have been advised by the NYSE that Proposal Nos. 1, 2 and 3 are considered to be “non-routine” under NYSE rules and we therefore expect broker non-votes to exist in connection with those proposals.

As a reminder, if you are a beneficial owner of shares held in street name, to ensure your shares are voted in the way you would prefer, you must provide voting instructions to your broker, bank or other agent by the deadline provided in the materials you receive from your broker, bank or other agent.

How many votes are needed to approve each proposal? How are abstentions and broker non-votes treated?

The following table summarizes the minimum vote needed to approve each proposal and the effect of abstentions and broker non-votes.

Proposal Number	Proposal Description	Vote Required for Approval	Effect of Abstentions	Effect of Broker Non-Votes
1	Election of directors	As this is an uncontested election, each director nominee must receive “For” votes from the majority of the votes cast on his or her election (i.e., the number of votes cast “For” a nominee’s election must exceed the number of votes cast “Against” that nominee’s election). Pursuant to our Third Amended and Restated Bylaws, as amended, or our Bylaws, any incumbent director who does not receive the required majority votes at the Annual Meeting will promptly tender his or her resignation to the Board, and the Board, after considering the recommendation of the Nominating and Corporate Governance Committee regarding such resignation, will determine whether to accept or reject the resignation. For a more detailed description of the majority voting process, see “Proposal No. 1: Election of Directors—General” below.	No effect	No effect
2	Advisory approval of the compensation of our named executive officers	“For” votes from holders of a majority in voting power of the shares present in person or represented by proxy at the Annual Meeting and entitled to vote on this proposal.	Against	No effect
3	Approval of the amendment and restatement of the 2018 Plan to, among other things, increase the aggregate number of shares of our common stock reserved for issuance under the 2018 Plan by 9,900,000 shares	“For” votes from holders of a majority in voting power of the shares present in person or represented by proxy at the Annual Meeting and entitled to vote on this proposal.	Against	No effect
4	Approval of an amendment of the Restated Certificate to increase the total number of shares of common stock authorized for issuance from 160,000,000 shares to 320,000,000 shares	“For” votes from holders of a majority of the outstanding shares entitled to vote on this proposal.	Against	Brokers have discretion to vote ⁽¹⁾
5	Ratification of the appointment of Ernst & Young LLP as our independent registered public accounting firm for the year ending December 31, 2020	“For” votes from holders of a majority in voting power of the shares present in person or represented by proxy at the Annual Meeting and entitled to vote on this proposal.	Against	Brokers have discretion to vote ⁽¹⁾

(1) We have been advised by the NYSE that this proposal is considered a “routine” matter under NYSE rules. Accordingly, if you hold your shares in street name and do not provide voting instructions to your broker, bank or other agent that holds your shares, your broker, bank or other agent

has discretionary authority under NYSE rules to vote your shares on this proposal. For more information, see “If I am a beneficial owner of shares held in street name and I do not provide my broker or bank with my voting instructions, what happens?” and “What are broker non-votes?” above. As a reminder, if you are a beneficial owner of shares held in street name, to ensure your shares are voted in the way you would prefer, you must provide voting instructions to your broker, bank or other agent by the deadline provided in the materials you receive from your broker, bank or other agent

What is the quorum requirement?

A quorum of stockholders is necessary to hold a valid meeting. A quorum will be present if stockholders holding at least a majority in voting power of the outstanding shares entitled to vote are present at the meeting in person or represented by proxy. On the record date, there were 116,211,355 shares outstanding and entitled to vote.

Your shares will be counted towards the quorum only if you submit a valid proxy (or one is submitted on your behalf by your broker, bank or other nominee) or if you vote in person at the meeting. Abstentions and broker non-votes will be counted towards the quorum requirement. If there is no quorum, the Chair of the Board may adjourn the meeting to another date without a stockholder vote.

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 within four business days after the Annual Meeting. If final voting results are not available to us in time to file a Form 8-K within four business days after the meeting, we intend to file a Form 8-K to publish preliminary results and, within four business days after the final results are known to us, file an additional Form 8-K to publish the final results.

When are stockholder proposals and director nominations due for next year’s Annual Meeting?

To be considered for inclusion in next year’s proxy materials, your proposal must be submitted in writing by December 31, 2020, to our Secretary at 7000 Marina Boulevard, Brisbane, California 94005, and you must comply with all applicable requirements of Rule 14a-8 promulgated under the Securities Exchange Act of 1934, as amended, or the Exchange Act.

Pursuant to our Bylaws, if you wish to bring a proposal before the stockholders or nominate a director at the 2021 Annual Meeting of stockholders, but you are not requesting that your proposal or nomination be included in next year’s proxy materials, you must notify our Secretary, in writing, not later than the close of business on February 17, 2021 nor earlier than the close of business on January 18, 2021. However, if our 2021 Annual Meeting of stockholders is not held between April 18, 2021 and June 17, 2021, to be timely, notice by the stockholder must be received not later than the 10th day following the day on which the first public announcement of the date of the 2021 Annual Meeting is made or the notice of the meeting is mailed, whichever first occurs. You are also advised to review our Bylaws, which contain additional requirements about advance notice of stockholder proposals and director nominations.

The chair of the Annual Meeting may determine, if the facts warrant, that a matter has not been properly brought before the meeting and, therefore, may not be considered at the meeting. In addition, the proxy solicited by the Board for the 2021 Annual Meeting of Stockholders will confer discretionary voting authority with respect to any proposal (i) presented by a stockholder at that meeting for which we have not been provided with timely notice and (ii) made in accordance with our Bylaws, if (x) the 2021 proxy statement briefly describes the matter and how management’s proxy holders intend to vote on it, and (y) the stockholder does not comply with the requirements of Rule 14a-4(c)(2) promulgated under the Exchange Act.

**PROPOSAL NO. 1:
ELECTION OF DIRECTORS**

General

Our Board currently consists of nine directors and there are nine nominees for director this year. Proxies may not be voted for a greater number of persons than the number of nominees named in this Proxy Statement. Each director to be elected and qualified will serve until the next annual meeting of stockholders and until a successor for such director is duly elected and qualified, or until the earlier death, resignation or removal of such director. The nominees for election have agreed to serve if elected, and management has no reason to believe that such nominees will be unavailable to serve. In the event the nominees are unable or decline to serve as directors at the time of the Annual Meeting, the proxies will be voted for any nominee who may be designated by the present Board of Directors to fill the vacancy. Unless otherwise instructed, the proxy holders will vote the proxies received by them FOR the nominees named below.

Each of the nine nominees, other than John H. Markels, Ph.D. and James R. Meyers, has been previously elected by our stockholders. Dr. Markels was initially recommended to the Nominating and Corporate Governance Committee by our Chief Executive Officer, upon the recommendation of another executive officer. Mr. Meyers was originally identified as a director candidate by a third-party recruiting firm and then recommended by our Chief Executive Officer to the Nominating and Corporate Governance Committee. While the Nominating and Corporate Governance Committee and the Board chose to nominate Alexander D. Macrae, our Chief Executive Officer, for election to the Board for the reasons set forth in his biography below, Dr. Macrae's employment agreement also provides that the Board shall nominate Dr. Macrae for election as a member of the Board at each annual meeting of stockholders occurring while Dr. Macrae's employment agreement is in effect.

Each of the nine nominees set forth in this Proxy Statement will be elected by the majority of the votes cast with respect to such nominee, which means that the number of votes "For" a nominee's election must exceed the number of votes "Against" that nominee (with abstentions and broker non-votes not counted as either a "For" or "Against" vote for that nominee's election). If an incumbent director does not receive the required majority vote, the director is required under our Bylaws to promptly tender his or her resignation to the Board. Within 90 days after the Annual Meeting, the Nominating and Corporate Governance Committee of the Board will make a recommendation to the Board of Directors as to whether to accept or reject the resignation. The Board will act by taking into account such committee's recommendation. If the Board does not accept the resignation, the Board is required to publicly disclose its decision and the rationale behind the decision.

The following includes a brief biography of each nominee for director, including their respective ages as of March 20, 2020. Each biography includes information regarding the specific experience, qualifications, attributes or skills that led the Nominating and Corporate Governance Committee and the Board to determine that the applicable nominee should serve as a member of the Board as of the date of this proxy statement.

Nominees

Alexander D. Macrae, M.B., Ch.B., Ph.D., age 57, has served as our President and Chief Executive Officer and as a member of our Board of Directors since June 2016. Dr. Macrae also serves on the board of directors of 4D Pharma plc. He has over twenty years of experience in the pharmaceutical industry most recently serving as the Global Medical Officer of Takeda Pharmaceuticals, from 2012 to March 2016, where he established and led the Global Medical Office, which encompasses medical affairs, regulatory affairs, pharmacovigilance, outcomes research and epidemiology, quantitative sciences and knowledge and informatics. From 2001 to 2012, Dr. Macrae held roles of increasing responsibility at GlaxoSmithKline, including Senior Vice President, Emerging Markets Research and Development, or R&D, from 2009 to 2012. In that position, he provided expertise and resources to create a first-of-its-kind group to expand GSK's global reach by providing R&D strategies, clinical development and regulatory resources to enter emerging markets and Asia-Pacific. From 2007 to 2008, he was Vice President, Business Development. In that position, he was responsible for scientific assessment and business development project leadership for the neurology, psychiatry, cardiovascular and metabolic therapeutic areas. Earlier in his career, he worked for SmithKline Beecham, where he was responsible for clinical development in the therapeutic areas of neurology and gastroenterology. Dr. Macrae received his B.Sc. in pharmacology and his M.B., Ch.B. with honors from Glasgow University. He is a member of the Royal College of Physicians. Dr. Macrae also earned his Ph.D. in molecular genomics at King's College, Cambridge. The Nominating and Corporate Governance Committee and the Board believe that Dr. Macrae's day-to-day leadership and intimate knowledge of our business and operations, as well as our relationships with partners, collaborators and investors, provides the Board with an in-depth understanding of the Company.

Robert F. Carey, age 61, has served as a member of our Board of Directors since June 2016. Mr. Carey served as executive vice president, chief business officer for Horizon Pharma plc, a biopharmaceutical company, from March 2014 to October 2019. Prior to that, he served as managing director and head of the healthcare investment banking group at JMP Securities LLC, a full-service investment bank from March 2003 to March 2014. Prior to JMP, Mr. Carey was a managing director in the healthcare

groups at Dresdner Kleinwort Wasserstein and Vector Securities International, Inc. He has also held roles at Shearson Lehman Hutton and Ernst & Whinney. Mr. Carey also serves on the board of directors of Beyond Air, Inc. (formerly AIT Therapeutics, Inc.). Mr. Carey received his B.S. in accounting from the University of Notre Dame. The Nominating and Corporate Governance Committee and the Board believe that Mr. Carey's extensive experience and knowledge in the healthcare investment banking industry, particularly with financings, global expansion and other strategic transactions by life-science companies, as well as his role in business development for a public biopharmaceutical company, provides the Board with valuable insight and contribution.

Stephen G. Dilly, M.B.B.S., Ph.D., age 60, has served as a member of our Board of Directors since March 2010. From May 2014 through June 2018 when he retired, Dr. Dilly served as Chief Executive Officer and a member of the board of directors of Aimmune Therapeutics, Inc. (formerly Allergen Research Corporation), a biotechnology company developing treatments for food allergies. From January 2012 to December 2012, he was Chief Executive Officer of PhotoThera, Inc., a medical device company. From 2006 to December 2011, he served as President and Chief Executive Officer and a member of the board of directors of APT Pharmaceuticals, Inc., a drug development company. From 2007 to 2009, he served as a member of the board of directors of Avigen, Inc., a biopharmaceutical company that merged with MediciNova, Inc. in December 2009. From 2003 to 2006, he served as Chief Medical Officer and Senior Vice President of Development of Chiron BioPharma, a biotechnology company that was later acquired by Novartis International AG. From 1998 to 2003, he held various management positions at Genentech, Inc., including Vice President of Development Sciences from 2002 to 2003 and Vice President of Medical Affairs from 1998 to 2001. From 1988 to 1998, Dr. Dilly held various management positions in drug development with SmithKline Beecham in the U.K. During his career, Dr. Dilly has been closely associated with the development and launch of marketed drugs for many therapeutic areas, including Kytril, Paxil, Kredex, Requip, TNKase, Xolair, Avastin, Raptiva, Tarceva, Lucentis, Cubicin and Palforzia. In 1982 Dr. Dilly received an M.B.B.S., the equivalent of an M.D. in the United States, from the University of London in the U.K. and a Ph.D. in cardiac physiology from University of London in 1988. Dr. Dilly brings medical expertise and significant drug development experience to our Board. The Nominating and Corporate Governance Committee and the Board believe that Dr. Dilly's extensive experience in all stages of drug development, from project prioritization through clinical trial design and data analysis to product launch, provides the Board with valuable insight into this process as the Company continues to advance and develop our pipeline of novel genomic and cell therapy assets.

John H. Markels, Ph.D., age 54, has served as a member of our Board of Directors since February 2020. Dr. Markels has over 30 years of leadership experience in the pharmaceutical industry. Since January 2019, he has served as President of Global Vaccines at Merck & Co., Inc., or Merck, where he leads an integrated team dedicated to discovery and development, supply and access, and global marketing and long-term strategy for the vaccines portfolio. Earlier roles at Merck included President, Latin America from January 2018 to January 2019, SVP, Global Human Health Business Strategy from January 2017 to December 2017, Managing Director, Mexico from November 2013 to January 2017, as well as a long career in senior leadership positions in major regions worldwide in manufacturing technology, operations and strategy, business development, alliance management, and supply chain. Dr. Markels received his Ph.D. in chemical engineering from the University of California, Berkeley and his B.S. in chemical engineering from the University of Delaware. The Nominating and Corporate Governance Committee and the Board believe that Dr. Markels' extensive leadership experience in operations, strategy and development provides valuable operational, strategy and management skills to the Board.

James R. Meyers, age 55, has served as a member of our Board of Directors since November 2019. He has over 30 years of commercial leadership experience in the biotechnology industry. Mr. Meyers worked at Gilead Sciences, Inc., or Gilead, from 1996 until his retirement in February 2018. Most recently, he served as Gilead's Executive Vice President of Worldwide Commercial Operations from November 2016 to February 2018, where he was responsible for global commercial activities, including pricing and market access in North America, Europe, Middle East, Australia and Japan. Mr. Meyers joined Gilead in 1996 where he successfully led several important product launches in the HIV and hepatitis C therapeutic areas. Prior to Gilead, Mr. Meyers held positions of increasing responsibility with Zeneca Pharmaceuticals and Astra USA. He currently serves on the board of directors of two public companies, Arbutus Biopharma Corporation and CytomX Therapeutics, Inc., and he remains an active advisor to several major biopharmaceutical companies. Mr. Meyers holds a B.S. in Economics from Boston College. The Nominating and Corporate Governance Committee and the Board believe that Mr. Meyers' extensive commercial leadership experience in the biotechnology industry provides valuable operational, commercial assessment and management skills to the Board.

H. Stewart Parker, age 64, has been a member of our Board of Directors since June 2014, and has been Chair since June 2017. Ms. Parker has over 30 years of experience in the biotechnology industry. Prior to focusing on boards and consulting, she served as the Chief Executive Officer of The Infectious Disease Research Institute (IDRI), a not-for-profit global health Research institute from March 2011 to December 2013. In 1992, Ms. Parker founded Targeted Genetics Corporation, a publicly traded Seattle-based biopharmaceutical company formed to develop gene-based treatments for acquired and inherited diseases that became a world leader in AAV gene therapy. She held the position of President and Chief Executive Officer and was a member of its board of directors from the company's inception until November 2008. Prior to founding Targeted Genetics, Ms. Parker served in various capacities at Immunex from August 1981 through December 1991, most recently as Vice President, Corporate Development. From February 1991 to January 1993, Ms. Parker served as President and a Director of Receptech Corporation, a company formed by Immunex in 1989 to accelerate the development of soluble cytokine receptor products. She has served on the board of directors

and the executive committee of BIO, the primary trade organization for the biotechnology industry. She currently serves on the board of directors of Armata Pharmaceuticals Inc. and Achieve Life Sciences, Inc. Ms. Parker received her B.A. and M.B.A. from the University of Washington. The Nominating and Corporate Governance Committee and the Board believe that Ms. Parker's senior executive experience in AAV gene therapy and biotechnology drug development provides valuable operational, commercial assessment and management skills to the Board.

Saira Ramasastry, age 44, has served as a member of our Board of Directors since June 2012. Since April 2009, she has served as Managing Partner of Life Sciences Advisory, LLC, a company that she founded to provide strategic advice, business development solutions and innovative financing strategies for the life science industry. Ms. Ramasastry also serves on the Industry Advisory Board of the Michael J. Fox Foundation for Parkinson's Research and as business and sustainability lead for the European Prevention of Alzheimer's Dementia consortium. From August 1999 to March 2009, Ms. Ramasastry was an investment banker with Merrill Lynch & Co., Inc. where she helped establish the biotechnology practice and was responsible for origination of mergers and acquisitions, or M&A, strategic and capital markets transactions. Prior to joining Merrill Lynch she served as a financial analyst in the M&A group at Wasserstein Perella & Co., an investment banking firm, from July 1997 to September 1998. Ms. Ramasastry currently serves on the board of directors of Cassava Sciences, Inc., Vir Biotechnology, Inc., Innovate Biopharmaceuticals, Inc. and Glenmark Pharmaceuticals, Ltd. Ms. Ramasastry received her B.A. in economics with honors and distinction and an M.S. in management science and engineering from Stanford University, as well as an M. Phil. in management studies from the University of Cambridge where she is a guest lecturer for the Bioscience Enterprise Programme and serves on the Cambridge Judge Business School Advisory Council. Ms. Ramasastry is also a Health Innovator Fellow of the Aspen Institute and a member of the Aspen Global Leadership Network. The Nominating and Corporate Governance Committee and the Board believe that Ms. Ramasastry's extensive experience in global healthcare investment banking and strategic advisory consulting provides valuable financial, commercial assessment and business development skills to the Board and her thorough understanding of our technology and programs provides the Board with valuable insight in the development of our novel genomic and cell therapy assets.

Karen L. Smith, M.D., Ph.D., M.B.A., L.L.M., age 52, has served on our Board of Directors since June 2018. Dr. Smith is a life sciences thought leader with over 20 years of biopharmaceutical experience bringing drugs into the clinic and through commercialization. She has been a key contributor to the successful development of multiple FDA and EMA approved products in several therapeutic areas, including oncology (Herceptin, Vyxeos), rare disease (Defitelio), cardiology (Irbesartan), dermatology (Voluma, Botox), neuroscience (Abilify) and anti-infectives (Teflaro). Since November 2018, Dr. Smith has been providing consulting services internationally. From May 2019 to January 2020, Dr. Smith served as President and Chief Executive Officer of Medeor Therapeutics, Inc. From June 2018 to May 2019, Dr. Smith served as Chief Executive Officer of Eliminate Cancer, Inc. From April 2015 to May 2018, she served as the Global Head of Research & Development and Chief Medical Officer of Jazz Pharmaceuticals plc, where she built the R&D function into a pipeline of neuroscience and oncology products across all stages of discovery and development. From January 2011 to March 2015, she was Senior Vice President, Global Medical Affairs and Global Therapeutic Area Head (Dermatology) for Allergan, Inc., a multi-specialty health care company. Earlier in her career, she held senior leadership roles at AstraZeneca plc and Bristol Myers Squibb Company. Dr. Smith holds several degrees, including an M.D. from the University of Warwick, a Ph.D. in oncology from the University of Western Australia, an M.B.A. from the University of New England and an L.L.M. (Masters in Law) from the University of Salford. Dr. Smith currently serves on the board of directors of Acceleron Pharma, Inc. and Antares Pharma, Inc. and previously served on the board of directors of Sucampo Pharmaceuticals, Inc. and Forward Pharma A/S. The Nominating and Corporate Governance Committee and the Board believe that Dr. Smith's extensive executive experience in global research and development, combined with tenure on prior public company boards provides us with access to a valuable skill-set as we translate our science into genomic medicines using our platform technologies in gene editing, gene therapy, gene regulation and cell therapy.

Joseph S. Zakrzewski, age 57, has served as a member of our Board of Directors since June 2017. Mr. Zakrzewski has over 25 years of experience in the biopharmaceutical industry with senior leadership experience in R&D, supply chain and manufacturing operations, business development and commercialization. Prior to focusing on serving on boards and investments, from 2010 through 2013, he was Chairman and Chief Executive Officer of Amarin Corporation PLC (formerly Amarin Pharmaceuticals, Inc.), where he led the development and commercialization of the company's first product, Vascepa. Mr. Zakrzewski previously served as a Venture Partner with Orbimed Advisors LLC, a venture capital firm, and as Chairman, President and Chief Executive Officer of Xcellerex, Inc., a privately held company focused on the commercialization of its proprietary manufacturing technology for biotherapeutics and vaccines. Earlier, he served as Chief Operating Officer of Reliant Pharmaceuticals, Inc. before its acquisition by GlaxoSmithKline in 2007 and held various executive positions at Eli Lilly & Company in the areas of R&D, manufacturing, finance and business development. Mr. Zakrzewski currently serves as a member of the board of directors of Acceleron Pharma, Inc. and Amarin. Mr. Zakrzewski received a B.S. in Chemical Engineering and an M.S. in Biochemical Engineering from Drexel University, and an M.B.A. in Finance from Indiana University. The Nominating and Corporate Governance Committee and the Board believe that Mr. Zakrzewski's significant experience as a Chief Executive Officer and leading a variety of functional areas including supply and manufacturing operations provides the Board with an important set of skills to assist in the oversight of the development of our novel genomic and cell therapy assets.

RECOMMENDATION OF THE BOARD OF DIRECTORS

The Board of Directors recommends that the stockholders vote FOR the election of each the nominees listed above.

Stockholder Engagement and Responsiveness

A priority for our Board of Directors is soliciting and listening to the views of our stockholders on a variety of topics, including our business and growth strategy, corporate governance practices and executive compensation matters. In this regard, we regularly engage with our institutional investors, and since our 2019 annual meeting of stockholders, we reached out to investors representing over 30% of our outstanding shares. Our discussions with our investors have been productive and informative, and have provided valuable feedback to our Board of Directors to help ensure that our Board's decisions are aligned with stockholder objectives.

Board Independence

The Board of Directors has determined that each of its directors is independent under applicable listing standards of The Nasdaq Stock Market LLC, or Nasdaq, except for Dr. Macrae, who is our Chief Executive Officer. There are no family relationships between any of our directors and any of our executive officers.

Board Committees and Meetings

The Board of Directors held six meetings and acted by unanimous written consent in lieu of a meeting three times during 2019. The Board of Directors has an Audit Committee, a Compensation Committee, and a Nominating and Corporate Governance Committee. Each director attended or participated in 75% or more of the aggregate of (i) the total number of meetings of the Board of Directors and (ii) the total number of meetings held by all committees of the Board on which such director served during 2019, in each case held during the period for which each respective director was serving as a director.

Audit Committee

The Audit Committee consists of three directors: Mr. Carey, Dr. Dilly and Ms. Ramasastry. Dr. Dilly was appointed to serve on the Audit Committee effective in January 2020. Mr. Zakrzewski served on the Audit Committee for all of 2019 and was independent under applicable Nasdaq listing standards and SEC rules with respect to audit committee members. Mr. Carey serves as the Chairman of this committee. Our Board of Directors has determined that each member of the Audit Committee is independent under the applicable listing standards of Nasdaq and SEC rules. The Board of Directors has determined that Mr. Carey is an "audit committee financial expert" as defined under SEC rules and has the requisite financial sophistication in accordance with the applicable Nasdaq listing standards. The Audit Committee held four meetings during 2019.

The Audit Committee assists the Board of Directors in its oversight of the integrity of our financial statements, the risk management and our internal controls and our compliance with legal and regulatory requirements. The Audit Committee interacts directly with, and evaluates the performance of, the independent registered public accounting firm, including determining whether to engage or dismiss the independent registered public accounting firm and to monitor the independent registered public accounting firm's qualifications and independence. The Audit Committee also pre-approves all audit services and permissible non-audit services provided by the independent registered public accounting firm. The Audit Committee Report is included herein in the section labeled "Report of the Audit Committee of the Board of Directors." The Audit Committee has a written charter, which is available on our website at <https://investor.sangamo.com/corporate-governance/governance-overview>.

Compensation Committee

The Compensation Committee consists of three directors: Ms. Parker, Dr. Smith and Mr. Zakrzewski, each of whom is independent under applicable Nasdaq listing standards and SEC rules. Mr. Zakrzewski and Dr. Smith were appointed to serve on the Compensation Committee effective in June 2019, after the 2019 annual meeting of stockholders. Ms. Parker served on the Compensation Committee until the 2019 annual meeting of stockholders, at which point the Compensation Committee was reconstituted with Mr. Zakrzewski and Dr. Smith. Ms. Parker was reappointed to serve on the Compensation Committee in September 2019. Effective April 1, 2020, the Compensation Committee will be reconstituted with Mr. Zakrzewski, Dr. Smith and Mr. Meyers, each of whom is independent under applicable Nasdaq listing standards and SEC rules. Dr. Roger Jeffs and Dr. Steven Mento, each of whom was independent under applicable Nasdaq listing standards and SEC rules, previously served on the Compensation Committee until their terms expired at the 2019 annual meeting of stockholders when they did not stand for reelection. Mr. Zakrzewski serves as Chairman of this committee. Before Mr. Zakrzewski was appointed to the Compensation Committee, Dr. Mento served as Chairman of this committee.

The Compensation Committee's responsibilities include (i) adopting, administering and reviewing compensation plans and programs for our executive officers, including incentive and equity plans and programs; (ii) approving compensation

arrangements for our executive officers; (iii) evaluating the performance of our executive officers; (iv) adjusting compensation arrangements as appropriate based upon performance; (v) reviewing, considering and approving compensation programs applicable to non-employee members of the Board of Directors; (vi) reviewing and monitoring management development and succession plans and activities and (vii) administering, concurrently with the Board of Directors, the Sangamo Therapeutics Inc. 401(k) Profit Sharing Plan and Trust, originally effective on January 1, 1998, and as most recently amended and restated as of June 24, 2015, or the 401(k) Plan.

The Compensation Committee may delegate any responsibility or authority of the Compensation Committee under its charter to one or more members of the Compensation Committee, as appropriate and as consistent with applicable laws and rules. The Compensation Committee does not, however, delegate any of its functions to others in determining or recommending executive or director compensation.

The Compensation Committee is authorized to engage, oversee and terminate independent compensation consultants and other professionals to assist in the design, formulation, analysis and implementation of compensation programs for our executive officers and other key employees. The Compensation Committee retained the services of Radford, a part of Aon plc, or Radford, in order to (i) assess compensation levels and mix of elements for our executive officers and vice presidents for 2019, (ii) review the peer group criteria and to recommend specific companies, (iii) assess the compensation of the non-employee directors and (iv) advise the committee on executive compensation and governance trends based on peer group trends and market practices.

The Compensation Committee held five meetings and acted three times by unanimous written consent in lieu of a meeting during 2019. The Compensation Committee has a written charter, which is available on our website at <https://investor.sangamo.com/corporate-governance/governance-overview>. For information regarding our processes and procedures for the consideration and determination of executive and director compensation, please see “Executive Compensation—Compensation Discussion and Analysis” and “—Director Compensation,” respectively.

Compensation Committee Interlocks and Insider Participation

During 2019, Ms. Parker, Dr. Smith, Mr. Zakrzewski and former directors Drs. Jeffs and Mento served on the Compensation Committee. None of our Compensation Committee members has been an officer or employee of Sangamo at any time. None of our executive officers serves on the board of directors or compensation committee of any entity that has one or more executive officers serving as a member of our Board or our Compensation Committee.

Nominating and Corporate Governance Committee

The Nominating and Corporate Governance Committee consists of three directors: Dr. Dilly, Mr. Meyers and Ms. Parker, each of whom is independent under applicable Nasdaq listing standards. Mr. Meyers was appointed to serve on the Nominating and Corporate Governance Committee effective in January 2020. Effective April 1, 2020, the Nominating and Corporate Governance Committee will be reconstituted with Dr. Dilly, Ms. Parker and Dr. Markels, each of whom is independent under applicable Nasdaq listing standards. Dr. Jeffs previously served on the Nominating and Corporate Governance Committee with Dr. Dilly and Ms. Parker until his term expired at the 2019 annual meeting of stockholders when he did not stand for reelection. Dr. Dilly serves as Chairman of this committee. The Nominating and Corporate Governance Committee considers and periodically reports on matters relating to the size, identification, selection and qualification of the Board of Directors and candidates nominated for the Board of Directors and its committees, and develops and recommends governance principles and policies applicable to the Company.

The Nominating and Corporate Governance Committee held three meetings during 2019. The Nominating and Corporate Governance Committee has a written charter, which is available on our website at <https://investor.sangamo.com/corporate-governance/governance-overview>. The Nominating and Corporate Governance Committee considers properly submitted stockholder recommendations for candidates for membership on the Board of Directors as described below under “—Identification and Evaluation of Nominees for Directors.” In evaluating such recommendations, the Nominating and Corporate Governance Committee seeks to achieve a balance of knowledge, experience and capability on the Board of Directors and to address the membership criteria set forth below under “—Director Qualifications.”

Director Qualifications

The Nominating and Corporate Governance Committee will use a variety of criteria to evaluate the qualifications and skills necessary for members of our Board of Directors. The Nominating and Corporate Governance Committee may assess character, judgment, business acumen and scientific expertise, and familiarity with issues affecting the biotechnology and pharmaceutical industries. Other qualifications will be determined on a case-by-case basis, depending on whether the Nominating and Corporate Governance Committee desires to fill a vacant seat or increase the size of the Board to add new directors. In addition, the Nominating and Corporate Governance Committee may also evaluate whether a potential director nominee’s skills are complementary to existing Board members’ skills or meet the Board’s need for operations, management, commercial, financial or other expertise. While the Nominating and Corporate Governance Committee does not prescribe specific diversity standards,

as a matter of practice, the committee considers diversity in the context of the Board as a whole and takes into account the personal characteristics and experiences of current and prospective directors that reflect a broad range of perspectives in the Board's decision-making process.

Identification and Evaluation of Nominees for Directors

The Nominating and Corporate Governance Committee utilizes a variety of methods for identifying and evaluating nominees for director. The Nominating and Corporate Governance Committee assesses the appropriate size of the Board of Directors, and whether any vacancies on the Board of Directors are expected due to retirement or otherwise. In the event that vacancies are anticipated, or otherwise arise, the Nominating and Corporate Governance Committee considers various potential candidates for director. Candidates may come to the attention of the Nominating and Corporate Governance Committee through current members of the Board of Directors or senior management, executive recruiting firms, stockholders or other persons. In addition, we have in the past and may from time to time again in the future engage a third-party search firm to assist in identifying potential directors. For example, we engaged a search firm to conduct a search on our behalf for a new director with extensive commercial and operational experience in the life sciences industry, and this search firm identified and recommended Mr. Meyers as a director candidate with the relevant experience. Candidates for director are evaluated at regular or special meetings of the Nominating and Corporate Governance Committee, and may be considered at any point during the year. The Nominating and Corporate Governance Committee will consider properly submitted stockholder recommendations for candidates for the Board of Directors. Nominees recommended by stockholders will receive the same consideration that nominees of the Board receive. Any stockholder recommendations proposed for consideration by the Nominating and Corporate Governance Committee must provide all information requested by the Nominating and Corporate Governance Committee relating to such recommendation, including the candidate's name and qualifications for membership on the Board of Directors and should be addressed to Investor Relations at the following address:

Investor Relations Department
Sangamo Therapeutics, Inc.
7000 Marina Boulevard
Brisbane, CA 94005

In evaluating such recommendations, the Nominating and Corporate Governance Committee applies the qualifications standards discussed above and seeks to achieve a balance of knowledge, experience and capability on the Board of Directors.

Leadership Structure of the Board

Under our Bylaws, the Board is not required to appoint our Chief Executive Officer as the Chair of the Board, and the Board does not have a policy on whether or not the roles of Chief Executive Officer and Chair of the Board should be separate. Currently two individuals serve in these two positions. Ms. Parker currently serves as the Chair of the Board. Ms. Parker has extensive knowledge and experience in the life science industry and an in-depth understanding of our business strategies and day-to-day operations, which makes her well suited to set the agenda and lead the discussions at Board meetings as the Chair. The Chair is responsible for chairing Board meetings and meetings of stockholders, setting the agenda for Board meetings and providing information to the Board members in advance of meetings and between meetings. In addition, our Chief Executive Officer, Dr. Macrae, also serves as a director on our Board. The Board believes that Dr. Macrae's membership as a director provides the Board with an in-depth understanding of our business operations because of his extensive experiences and knowledge of the day-to-day management of all aspects of our operations. This also facilitates communications between the Board and management by ensuring a regular flow of information, thereby enhancing the Board's ability to make informed decisions on critical issues facing our company.

Of the nine directors on the Board following the Annual Meeting, eight directors are independent under applicable Nasdaq corporate governance rules. The Board believes that this establishes a strong independent board that provides effective oversight of the Company. Moreover, in addition to feedback provided during the course of Board meetings, the independent directors conduct regular executive sessions without the presence of Dr. Macrae or any other members of management. We believe that our leadership structure of the Board is appropriate given the nature and size of our business, because it provides both effective independent oversight and expertise in the complexity and management of our operations as a life sciences company.

Oversight of Risk Management by the Board

Our Board of Directors is generally responsible for the oversight of corporate risk in its review and deliberations relating to our activities. The Audit Committee oversees management of risks associated with our financial and accounting systems, public financial reporting, investment strategies and policy, and certain other matters delegated to the Audit Committee, including risks associated with our information technology systems (including cybersecurity risks). Our Board of Directors regularly reviews information regarding our cash position, liquidity and operations, as well as the risks associated with each. The Board regularly

reviews plans, results and potential risks related to our lead therapeutic development programs and other preclinical programs as well as financial and strategic risks related to our business and operations.

In addition, the Nominating and Corporate Governance Committee monitors the effectiveness of our corporate policies and manages risks associated with the independence of the Board of Directors and potential conflicts of interest. Our Compensation Committee oversees risk management as it relates to our compensation plans, policies and practices for all employees, including executives, particularly whether our compensation programs may create incentives for our employees to take excessive or inappropriate risks that could have a material adverse effect on the Company. While each committee is responsible for evaluating certain risks and overseeing the management of such risks, the entire Board of Directors is regularly informed through committee reports about such risks. For 2020, the Board has requested the creation of a Compliance Committee which will be staffed by employees and report directly to the Board. The Compliance Committee will have its first meeting in the second quarter of 2020. Separately, we have created a Corona virus task force that is led by the Chief Financial Officer and reports up to the Board through the Chief Financial Officer and the Chief Executive Officer.

Annual Meeting Attendance

Although we do not have a formal policy regarding attendance by members of the Board of Directors at our annual meetings of stockholders, directors are encouraged to attend annual meetings of our stockholders. Other than Ms. Ramasastry, all of our then current directors who were nominated for re-election attended the 2019 annual meeting of stockholders.

Communications with the Board of Directors

Our Board of Directors currently does not have a formal process for stockholders to send communications to the Board of Directors. Although we do not have a formal policy regarding communications with the Board of Directors, stockholders may communicate with the Board of Directors, including the non-management directors, by sending a letter to the Sangamo Board of Directors, c/o Investor Relations, 7000 Marina Boulevard, Brisbane, California 94005. Stockholders who would like their submission directed to a particular member of the Board of Directors may so specify. The Board of Directors does not recommend that formal communication procedures be adopted at this time because it believes that informal communications are sufficient to communicate questions, comments and observations that could be useful to the Board.

Code of Business Conduct and Ethics

The Board of Directors has adopted a Code of Business Conduct and Ethics, which is applicable to all employees and directors of the Company. A copy of our Code of Business Conduct and Ethics is available on our website at <https://investor.sangamo.com/corporate-governance/governance-overview> in the Investors + Media Section under Corporate Governance. In the event that we make any amendments to or grant any waivers of, a provision of the Code of Business Conduct and Ethics that applies to the principal executive officer, principal financial officer, or principal accounting officer that requires disclosure under applicable SEC rules, we intend to disclose such amendment or waiver and the reasons therefore, on our website.

Prohibitions on Hedging, Pledging and Speculative Transactions

Under the terms of our insider trading policy, none of our directors, officers and other employees may engage in any hedging or monetization transactions relating to our securities, including through the use of financial instruments such as prepaid variable forwards, equity swaps, collars and exchange funds. In addition, all of our officers, directors and employees are prohibited from short-selling our securities or engaging in transactions involving Sangamo-based derivative securities (other than those granted under our employee stock option or equity incentive plans), and are further prohibited from holding our securities in a margin account or otherwise pledging our securities as collateral for a loan.

Director Compensation

The following table sets forth certain information regarding the compensation of each non-employee director for service as a member of the Board of Directors during 2019. Dr. Macrae, our President and Chief Executive Officer, is not listed in the following table because he is our employee. Dr. Macrae's compensation is described under "Executive Compensation" and he received no additional compensation for serving on our Board of Directors in 2019. In addition, Dr. Markels is not listed in the following table since he joined our Board of Directors in February 2020 and received no compensation from Sangamo in any capacity during 2019.

Name	Fees Earned or Paid in Cash (\$) ⁽¹⁾	Option Awards (\$) ^{(2) (3) (5)}	Stock Awards (\$) ^{(2) (4) (6)}	Total (\$)
Robert F. Carey	60,000	92,862	23,450	176,312
Stephen G. Dilly	45,000	92,862	23,450	161,312
Roger Jeffs (7)	28,750	—	—	28,750
Steven J. Mento (7)	27,500	—	—	27,500
James R. Meyers (8)	10,000	190,758	54,000	254,758
H. Stewart Parker	87,500	92,862	23,450	203,812
Saira Ramasastry	50,000	92,862	23,450	166,312
Karen L. Smith	45,625	92,862	23,450	161,937
Joseph S. Zakrzewski	61,250	92,862	23,450	177,562

- (1) Consists of the annual retainer fee for service as a member of the Board of Directors or any Board committee. For further information concerning such fees, see the section below entitled “—Director Annual Retainer and Meeting Fees.”
- (2) Represents the grant date fair value of the awards computed in accordance with Financial Accounting Standards Board, or FASB, Accounting Standards Codification Topic 718, *Compensation—Stock Compensation*, or ASC 718. The assumptions used in the calculation of such grant date fair values are described in Note 9 of the Notes to Consolidated Financial Statements included in our Annual Report on Form 10-K for the year ended December 31, 2019 filed with the SEC on February 28, 2020, or the 2019 Form 10-K.
- (3) Pursuant to the then existing automatic grant program under the 2018 Plan Mr. Carey, Dr. Dilly, Ms. Parker, Ms. Ramasastry, Dr. Smith and Mr. Zakrzewski each received an option to purchase 15,000 shares of common stock with an exercise price per share of \$9.38 on the date of the 2019 annual meeting of stockholders, and each such option had an aggregate grant date fair value of \$92,862. On November 22, 2019, Mr. Meyers received an option to purchase 30,000 shares of common stock with an exercise price per share of \$9.81 in connection with his appointment to the Board of Directors on November 22, 2019 and such option had an aggregate grant date fair value of \$190,758.
- (4) Pursuant to the then existing automatic grant program under the 2018 Plan, Mr. Carey, Dr. Dilly, Ms. Parker, Ms. Ramasastry, Dr. Smith and Mr. Zakrzewski each received an award of 2,500 restricted stock units, or RSUs, on the date of the 2019 annual meeting of stockholders and each such RSU had an aggregate grant date fair value of \$23,450. On November 22, 2019, Mr. Meyers received an award of 5,000 RSUs in connection with his appointment to the Board of Directors and such RSU had an aggregate grant date fair value of \$54,000.
- (5) As of December 31, 2019, the following non-employee directors held options to purchase the following number of shares of our common stock: Mr. Carey, 70,000 shares; Dr. Dilly, 150,000 shares; Mr. Meyers, 30,000 shares; Ms. Parker, 110,000 shares; Ms. Ramasastry, 80,000 shares; Dr. Smith, 45,000 shares; and Mr. Zakrzewski, 60,000 shares.
- (6) As of December 31, 2019, the following non-employee directors held RSUs for the following number of shares of our common stock: Mr. Carey, 2,500 shares; Dr. Dilly, 2,500 shares; Mr. Meyers, 5,000 shares; Ms. Parker, 2,500 shares; Ms. Ramasastry, 2,500 shares; Dr. Smith, 5,833 shares; and Mr. Zakrzewski, 2,500 shares.
- (7) Drs. Jeffs and Mento determined not to stand for re-election and their terms expired as of the 2019 annual meeting of stockholders.
- (8) Mr. Meyers was appointed as a non-employee member of the Board of Directors on November 22, 2019; accordingly, his retainer fees were pro-rated over his period of service in 2019.

Processes and Procedures for Determining Director Compensation

The charter of the Compensation Committee provides the Compensation Committee with the responsibility for reviewing, considering and approving compensation programs applicable to non-employee directors. It is the practice of the Compensation Committee to seek input from outside compensation consultants, including Radford, our Compensation Committee’s compensation consultant, as it deems appropriate.

Director Annual Retainer and Meeting Fees

Each non-employee member of the Board of Directors receives an annual cash retainer of \$40,000. To the extent the Board of Directors meets more than 10 times in any year, each non-employee member of the Board of Directors will receive, for each meeting in excess of 10, a per meeting fee of \$1,000 if attended in person and \$500 if attended by video or telephone conference. The Chair of the Board of Directors receives an additional annual cash retainer of \$35,000. In addition, the non-employee members of the Board of Directors serving as the Chairman of the Audit Committee, the Chairman of the Compensation Committee and the Chairman of the Nominating and Corporate Governance Committee receive an additional annual cash retainer of \$20,000, \$15,000 and \$10,000, respectively. Each non-employee member of the Board of Directors serving as a member of the

Audit Committee, the Compensation Committee and the Nominating and Corporate Governance Committee, other than the Chairman, receives an additional annual cash retainer of \$10,000, \$7,500 and \$5,000, respectively. All retainer fees are subject to pro-ratio for directors who join or leave the Board of Directors or the respective committee or begin or cease to serve as Chair of the Board or the respective committee, during the year.

Equity Incentives Granted Under the 2018 Plan

Under the current automatic grant program under the 2018 Plan, on the date of each annual stockholders meeting, each individual serving as a non-employee Board member at that time, who has served on our Board for at least six months, and who will continue serving as a non-employee Board member immediately after such annual stockholders meeting will automatically be granted a nonqualified stock option, or NSO, to purchase 15,000 shares of common stock and a RSU in respect of 2,500 shares of common stock under the 2018 Plan. The shares subject to each annual 15,000 share automatic NSO grant made to a continuing Board member will vest in 12 successive equal monthly installments over the one-year period measured from the grant date. The shares subject to each 2,500 share automatic RSU grant made to a continuing Board member will fully vest on the earlier of (x) the first anniversary of the date of grant or (y) the day prior to the next annual stockholders meeting, subject to the director's continued service through the applicable vesting date.

Under the current automatic grant program under the 2018 Plan, each non-employee Board member who is initially appointed or elected to the Board will automatically be granted an NSO to purchase 30,000 shares of common stock and a RSU award in respect of 5,000 shares of common stock under the 2018 Plan. The shares subject to each initial 30,000 share automatic NSO grant made to a newly appointed Board member will vest in 36 successive equal monthly installments over the three-year period measured from the grant date. The shares subject to each 5,000 share automatic RSU grant will vest with respect to 1/3rd of the shares in three equal annual installments over the three-year period measured from the date of grant.

Each automatic NSO grant will have an exercise price per share equal to the fair market value per share of our common stock on the grant date and will have a term of 10 years, subject to earlier termination following the director's termination of continuous service. Each automatic NSO option grant will be immediately exercisable for all of the option shares; however, we may repurchase, at the lower of the exercise price paid per share or the fair market value per share, any shares purchased under the NSO that are not vested at the time of the director's termination of continuous service. The shares subject to each automatic NSO grant and each automatic RSU grant will immediately vest in full upon the director's death or disability or upon the occurrence of a change in control or hostile takeover (as such terms are defined in the 2018 Plan) in each subject to the director's continuous service through such date.

Under the current automatic grant program under the 2018 Plan, on the date of the 2019 annual meeting of stockholders, Mr. Carey, Dr. Dilly, Ms. Parker, Ms. Ramasastry, Dr. Smith and Mr. Zakrzewski each received an option to purchase 15,000 shares of common stock with an exercise price per share of \$9.38, and a RSU award of 2,500 shares.

Under the current automatic grant program under the 2018 Plan, Mr. Meyers was awarded an initial option to purchase 30,000 shares of our common stock on November 22, 2019, with an exercise price per share of \$9.81. The option will vest in 36 successive equal monthly installments over the three-year period measured from the grant date, subject to Mr. Meyers' continuous service on each monthly vesting date. Also on November 22, 2019, Mr. Meyers received a RSU award of 5,000 shares of common stock pursuant to the automatic grant program under the 2018 Plan, which will vest with respect to 1/3rd of the shares in three equal annual installments over the three-year period measured from the grant date, subject to Mr. Meyers' continuous service on each annual vesting date. The remaining terms of his options and RSU award are similar to the terms of the annual grants under the current automatic grant program.

Under the current automatic grant program under the 2018 Plan, Dr. Markels was awarded an initial option to purchase 30,000 shares of our common stock on February 11, 2020, with an exercise price per share of \$7.60. The option will vest in 36 successive equal monthly installments over the three-year period measured from the grant date, subject to Dr. Markels' continuous service on each monthly vesting date. Also on February 11, 2020, Mr. Meyers received a RSU award of 5,000 shares of common stock pursuant to the automatic grant program under the 2018 Plan, which will vest with respect to 1/3rd of the shares in three equal annual installments over the three-year period measured from the grant date, subject to Dr. Markels' continuous service on each annual vesting date. The remaining terms of his options and RSU award are similar to the terms of the annual grants under the current automatic grant program.

Proposed New Automatic Grant Program Under Amended and Restated 2018 Equity Incentive Plan

If Proposal No. 3 is approved at the Annual Meeting by the stockholders, the automatic grant program under the 2018 Plan will be replaced by a new automatic grant program under the Amended 2018 Plan. Under the automatic grant program of the Amended 2018 Plan, each individual who is a non-employee Board member will automatically be granted a NSO to purchase 20,000 shares of common stock and a RSU award in respect of 10,000 shares of common stock on an annual basis as follows: (i) with respect to 2020, such annual awards will be granted on the date of the 2020 Annual Meeting; and (ii) with respect to each year following 2020, such annual awards will be granted on the 25th day of February of such year (or if such 25th day is not a

trading day, the immediately preceding trading day in February); in each case, provided that such individual is a non-employee Board member on the date of grant, has served as a non-employee Board member for at least three months prior to the date of grant, and will continue serving as a non-employee Board member immediately after the date of grant. The shares subject to each annual 20,000 share automatic NSO grant made to a continuing Board member will vest in 12 successive equal monthly installments over the one-year period following the date of grant, subject to the director's continuous service through the applicable vesting dates. The shares subject to each annual 10,000 share automatic RSU award grant made to a continuing Board member in 2020 will fully vest on the earlier of (x) the first anniversary of the date of grant or (y) the day prior to the next annual stockholders meeting, subject to the director's continuous service through the applicable vesting date. The shares subject to each annual 10,000 share automatic RSU award grant made to a continuing Board member following 2020 will fully vest on the first anniversary of the date of grant, subject to the director's continuous service through the applicable vesting date.

Under the automatic grant program of the Amended 2018 Plan, each individual who is initially appointed or elected as a non-employee Board member on or after the 2020 Annual Meeting will, on the date of such appointment or election, automatically be granted a NSO to purchase 30,000 shares of common stock and a RSU award in respect of 15,000 shares of common stock. The shares subject to each initial 30,000 share automatic NSO grant made to a newly appointed or elected Board member will vest in 36 successive equal monthly installments over the three-year period following the date of grant, subject to the director's continuous service through the applicable vesting dates. The shares subject to each initial 15,000 share automatic RSU award grant made to a newly appointed or elected Board member will vest in three equal annual installments over the three-year period following the date of grant, subject to the director's continuous service through the applicable vesting dates.

Each automatic NSO grant will have an exercise price per share equal to the fair market value per share of our common stock on the grant date and will have a term of 10 years, subject to earlier termination following the director's termination of continuous service. Each automatic NSO grant will be immediately exercisable for all of the option shares; however, we may repurchase, at the lower of the exercise price paid per share or the fair market value per share, any shares purchased under the NSO that are not vested at the time of the director's termination of continuous service.

The shares subject to each automatic NSO grant and each automatic RSU award grant will immediately vest in full upon the director's termination of continuous service due to death or disability, or upon the occurrence of a change in control or hostile takeover (each as defined in the Amended 2018 Plan), subject to the director's continuous service through the date of such change in control or hostile takeover.

PROPOSAL NO. 2:

ADVISORY VOTE ON EXECUTIVE COMPENSATION

General

Under Section 14A(a)(1) of the Exchange Act, our stockholders are entitled to vote to approve, on a non-binding advisory basis, the compensation of our named executive officers as disclosed in this Proxy Statement in accordance with SEC rules (commonly referred to as a “say-on-pay” vote).

This vote is not intended to address any specific item of compensation, but rather the overall compensation of our named executive officers and the philosophy, policies and practices described in this Proxy Statement. Based on the voting results from the 2017 annual meeting of stockholders, our stockholders voted “For,” and we have adopted an annual advisory vote on the compensation of the named executive officers in our proxy materials, which will remain in effect until the next required vote on the frequency of stockholder votes on the compensation of named executive officers. Accordingly, the next advisory vote on the compensation of our named executive officers will be held at the 2021 Annual Meeting of Stockholders. Although the vote is non-binding, the Board of Directors and the Compensation Committee value the opinions of our stockholders and will consider the outcome of the vote when making future compensation decisions affecting our executive officers.

We encourage stockholders to read closely the “Executive Compensation” section of this Proxy Statement, beginning with the Compensation Discussion and Analysis, or CD&A, included in the section labeled “Executive Compensation—Compensation Discussion and Analysis,” which describes in detail our executive compensation programs, policies and practices with respect to the compensation of our named executive officers in the year ended December 31, 2019.

Our overarching compensation goal is to create a positive relationship between our compensation program and our corporate performance.

We design our executive compensation program to implement our core objectives of attracting and retaining highly qualified executives with extensive industry or scientific experience, rewarding executives for success in meeting our annual clinical development and other research and operational goals, aligning the interests of our executives with those of our stockholders and recognizing executives’ individual performance and, for executives other than our Chief Executive Officer, achieving their individual goals and those of the functional organizations that they manage.

The Compensation Committee established the 2019 compensation program and the associated Company goals in accordance with the foregoing goals and philosophy. During 2019, we continued to advance the application and value of our technology platforms, as we work towards becoming a sustainable, fully integrated biopharmaceutical company. Our goal is to develop, manufacture and commercialize novel, proprietary genomic medicines that leverage our technical expertise, and strategically collaborate with industry partners when appropriate. In 2019, we presented data at key conferences for our pipeline product candidates, achieved clinical milestones under partnered programs with Pfizer Inc., or Pfizer, and Bioverativ Inc., (now Sanofi Genzyme, a global business unit of Sanofi, or Sanofi), including transferring an investigational new drug, or IND, application to Pfizer, which plans to commence a Phase 3 registrational trial for SB-525, our first Phase 3 product candidate. We also began enrolling new Phase 1/2 trials for certain of our wholly-owned assets, and received clinical trial authorization, or CTA, to commence additional trials in the United Kingdom in 2020. In addition to these clinical milestones, we also grew our personnel and infrastructure, and integrated Sangamo France S.A.S. to provide a foundation for our strategic initiatives on a global level. In addition to forming a Scientific Advisory Board, we laid the groundwork for our global licensing collaboration with Biogen MA, Inc. and Biogen International GmbH, or collectively Biogen, which we executed in early 2020. The highlights of our business successes in 2019 are summarized under the heading “2019 and Early 2020 Performance Highlights” in the CD&A. The Board of Directors believes our executive compensation program uses appropriate structures and sound pay practices that are effective in achieving our core objectives.

Resolution

The Board is asking our stockholders to indicate their support for the compensation of our named executive officers, as described in this Proxy Statement, by casting a non-binding advisory vote “FOR” the following resolution:

“Resolved that the Company’s stockholders hereby approve, on an advisory basis, the compensation of the Company’s named executive officers as disclosed in this Proxy Statement pursuant to the compensation disclosure rules of the SEC, including the Compensation Discussion and Analysis, the various compensation tables and the accompanying narrative discussion and any related material included in this Proxy Statement.”

Advisory approval of this Proposal No. 2 requires votes “FOR” from holders of a majority in voting power of the shares present in person or represented by proxy at the Annual Meeting and entitled to vote on this Proposal No. 2.

RECOMMENDATION OF THE BOARD OF DIRECTORS

The Board of Directors recommends an advisory vote FOR the resolution to approve, on an advisory basis, the compensation of the named executive officers as disclosed in this Proxy Statement pursuant to the compensation disclosure rules of the SEC.

PROPOSAL NO. 3:

AMENDMENT AND RESTATEMENT OF THE 2018 EQUITY INCENTIVE PLAN

Our Compensation Committee approved an amendment and restatement of the Sangamo Therapeutics, Inc. 2018 Equity Incentive Plan, or the 2018 Plan, on March 20, 2020, subject to approval by our stockholders. Throughout this Proxy Statement, we refer to the 2018 Plan, as amended and restated by our Compensation Committee on March 20, 2020, as the “Amended 2018 Plan.”

In this Proposal No. 3, we are seeking stockholder approval of the Amended 2018 Plan to make the following material changes from the 2018 Plan:

- increase the aggregate number of shares of our common stock that may be issued under the Amended 2018 Plan by 9,900,000 shares, subject to adjustment for certain changes in our capitalization (and for purposes of this Proposal No. 3, we refer to such change as the “Share Reserve Amendment”);
- increase the aggregate maximum number of shares of our common stock that may be issued pursuant to the exercise of incentive stock options under the Amended 2018 Plan by 19,800,000 shares (for a total of 37,400,000 shares), subject to adjustment for certain changes in our capitalization (and for purposes of this Proposal No. 3, we refer to such change as the “ISO Limit Amendment”); and
- make the following changes with respect to the provisions of the automatic grant program for our non-employee directors (as described below in this Proposal No. 3) under the Amended 2018 Plan: (i) increase the number of shares of our common stock that are subject to certain awards granted pursuant to the automatic grant program as follows, in each case subject to adjustment for certain changes in our capitalization: (a) increase the number of shares of our common stock that are subject to one-time RSU awards granted to our newly elected or appointed non-employee directors by 10,000 shares; and (b) increase the number of shares of our common stock that are subject to annual stock option and RSU awards granted to our continuing non-employee directors by 5,000 shares and 7,500 shares, respectively; (ii) change the date of grant for annual stock option and RSU awards granted to our continuing non-employee directors for each year following 2020 (from the date of the annual stockholders meeting in such year to the 25th day of February of such year (or if such 25th day is not a trading day, the immediately preceding trading day in February)); (iii) change the vesting schedule for annual RSU awards granted to our continuing non-employee directors for each year following 2020 (from full vesting on the earlier of the first anniversary of the date of grant or the day prior to the next annual stockholders meeting to full vesting on the first anniversary of the date of grant, in each case subject to the director’s continuous service through the applicable vesting date); and (iv) provide that an individual must have served as a non-employee director for at least three (instead of six) months prior to the date of grant in order to be eligible to receive annual stock option and RSU awards (and for purposes of this Proposal No. 3, we refer to such changes as the “Automatic Grant Program Amendment”).

The effectiveness of the Share Reserve Amendment and the ISO Limit Amendment is contingent upon approval of Proposal No. 4 by our stockholders. Accordingly:

- if this Proposal No. 3 and Proposal No. 4 are both approved by our stockholders, then the Amended 2018 Plan (including the Share Reserve Amendment, the ISO Limit Amendment and the Automatic Grant Program Amendment) will become effective as of the date of the Annual Meeting, with the new shares reserved for issuance under the Share Reserve Amendment being reserved effective upon the filing of the Common Increase Certificate (as defined in Proposal No. 4) with the Secretary of State of the State of Delaware;
- if this Proposal No. 3 is approved by our stockholders, but Proposal No. 4 is not approved by our stockholders, then the Amended 2018 Plan (including the Automatic Grant Program Amendment, but not the Share Reserve Amendment or the ISO Limit Amendment) will become effective as of the date of the Annual Meeting; and
- if this Proposal No. 3 is not approved by our stockholders, then the Amended 2018 Plan will not become effective and the 2018 Plan will continue to be effective in accordance with its terms.

Stockholder approval of this Proposal No. 3 will also constitute pre-approval of each award granted under the Amended 2018 Plan pursuant to the provisions of the automatic grant program for our non-employee directors (as described below in this Proposal No. 3).

Why You Should Vote to Approve the Amended 2018 Plan

Equity Awards Are an Important Part of Our Compensation Philosophy

Our Board believes that the issuance of equity awards is a key element underlying our ability to attract, retain and motivate key personnel, non-employee directors and consultants because of the strong competition for highly trained and experienced individuals among biotechnology and pharmaceutical companies, especially in the greater San Francisco Bay area. Therefore, the

Board believes that the Amended 2018 Plan is in the best interests of our business and our stockholders and recommends a vote in favor of this Proposal No. 3.

Approval of this Proposal No. 3 and Proposal No. 4 by our stockholders will allow us to grant equity awards under the Amended 2018 Plan at levels we determine to be appropriate. The Amended 2018 Plan will also allow us to continue to utilize equity awards as long-term incentives to secure and retain the services of our employees, non-employee directors and consultants, consistent with our compensation philosophy and common compensation practice for our industry in the greater San Francisco Bay Area. To date, equity awards have been a key aspect of our program to attract and retain key employees, non-employee directors and consultants. We believe the use of equity awards strongly aligns the interests of our employees with those of our stockholders by placing a considerable proportion of our employees' total compensation "at risk" because it is contingent on the appreciation in value of our common stock. In addition, we believe equity awards encourage employee ownership of our common stock and promote retention through the reward of long-term Company performance.

We Carefully Manage the Use of Equity Awards and the Size of our Share Reserve Increase Request is Reasonable

Our compensation philosophy reflects broad-based eligibility for equity awards, and we generally grant equity awards to all of our employees and non-employee directors. However, we recognize that equity awards dilute existing stockholders, and, therefore, we are mindful to responsibly manage the growth of our equity compensation program. We are committed to effectively monitoring our equity compensation share reserve, including our "burn rate," to ensure that we maximize stockholders' value by granting the appropriate number of equity awards necessary to attract, reward, and retain employees, non-employee directors and consultants. The tables below show certain historical overhang and burn rate percentages.

Determination of Number of Additional Shares to Request for the Amended 2018 Plan

In its determination to approve the Amended 2018 Plan, our Compensation Committee reviewed an analysis prepared by Radford, its compensation consultant, which included an analysis of our historic and estimated prospective share usage needs and the potential costs of the Amended 2018 Plan. Specifically, our Compensation Committee considered:

- **Market Competitiveness.** The Amended 2018 Plan plays an important role in our effort to align the interests of participants and stockholders. Moreover, in our industry, equity awards are an important tool in recruiting, retaining and motivating highly skilled and critical employee talent, upon whose efforts our success is dependent.
- **Estimated Equity Usage and Share Pool Duration.** Our Compensation Committee considered our historic burn rate levels in determining how long the Amended 2018 Plan share authorization could potentially last. We expect the share authorization under the Amended 2018 Plan to provide us with enough shares for awards for approximately one to two years, with actual timing dependent on a variety of factors, including the price of our shares and hiring activity during the next few years, and rates of forfeiture of outstanding awards, and noting that future circumstances may require us to change our current equity grant practices. We cannot predict our future equity grant practices, the future price of our shares or future hiring activity with any degree of certainty at this time, and the share reserve under the Amended 2018 Plan could last for a shorter or longer period of time.
- **External Factors.** Radford's analysis, which is based on generally accepted evaluation methodologies, concluded that the number of shares under the Amended 2018 Plan is well within generally accepted standards as measured by an analysis of its cost relative to industry standards.

Historic Use of Equity Awards and Outstanding Awards

Overhang

The following table provides certain additional information regarding our use of equity awards:

	As of March 20, 2020 Record Date
Total number of shares of common stock subject to outstanding stock options	12,512,294
Weighted-average exercise price of outstanding stock options	\$ 9.83
Weighted-average remaining term in years of outstanding stock options	8.26
Total number of shares of common stock subject to outstanding full value awards	2,282,279
Total number of shares of common stock available for grant under the 2018 Plan	1,784,833
Total number of shares of common stock available for grant under other equity incentive plans	2,757,600 *
Total number of shares of common stock outstanding	116,211,355
Per-share closing price of common stock as reported on The Nasdaq Global Select Market	\$ 6.01

* Reflects the number of shares available under the Sangamo Therapeutics, Inc. 2010 Employee Stock Purchase Plan, as amended, or the Purchase Plan, as of the record date. No other shares are available for grant under any other equity incentive plan.

Burn Rate

The following table provides detailed information regarding the activity related to the 2018 Plan for fiscal year 2019:

	For the Year Ended December 31, 2019
Total number of shares of common stock subject to stock options granted	4,530,288
Total number of shares of common stock subject to full value awards granted	834,745
Weighted-average number of shares of common stock outstanding	112,114,000
Adjusted Burn Rate (1)	5.16 %
Unadjusted Burn Rate (2)	4.79 %

(1) Adjusted Burn Rate is calculated as: (shares subject to stock options granted + shares subject to full value awards granted)/weighted-average common stock outstanding. For purposes of this calculation, shares subject to full value awards granted are increased by a 1.5x volatility multiplier for fiscal year 2019. However, the share reserve under the 2018 Plan is reduced by 1.33 shares for each share issued pursuant to a full value award.

(2) Unadjusted Burn Rate is calculated as: (shares subject to stock options granted + shares subject to full value awards granted)/weighted-average common stock outstanding.

Requested Additional Shares

Subject to adjustment for certain changes in our capitalization, if this Proposal No. 3 and Proposal No. 4 are both approved by our stockholders, then under the Amended 2018 Plan, we will have 9,900,000 new shares available for grant after our Annual Meeting for a total of approximately 11,684,833 shares available for grant after our Annual Meeting (based on shares available under the 2018 Plan as of March 20, 2020) (plus the Prior Plans' Returning Shares (as defined and further described below under "—Description of the Amended 2018 Plan—Shares Available for Awards") as such shares become available from time to time).

We believe that our request for 9,900,000 new shares under the Amended 2018 Plan is necessary for us to remain competitive in the greater San Francisco Bay Area marketplace and support our equity grant practices to align the interests of our employees and non-employee directors with our stockholders. We anticipate the available pool of shares in the Amended 2018 Plan will be sufficient for our equity awards for approximately the next one to two years after considering our present average share usage rate, and that such pool of shares is necessary to provide a predictable amount of available equity awards for attracting, retaining, and motivating employees, non-employee directors and consultants.

Note Regarding Forward-Looking Statements

We do not as a matter of course make public forecasts as to our utilization of equity awards due to the unpredictability of the underlying assumptions and estimates. The inclusion of the information set forth above should not be regarded as an indication or prediction of actual future outcomes, and the statements should not be relied upon as such. Neither we nor any other person makes any representation to any of our stockholders regarding actual outcomes compared to the information contained in the forward-looking statements set forth above. Although presented with some numerical specificity, these statements are not fact and reflect numerous assumptions and estimates as to future events made by our management that our management believed were reasonable at the time this filing was prepared and other factors such as industry performance and general business, economic, regulatory, market and financial conditions, as well as factors specific to our business, all of which are difficult to predict and many of which are beyond the control of our management. The forecasts are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Exchange Act. These statements involve risks and uncertainties that could cause actual outcomes to differ materially from those in the forward-looking statements, including our ability to attract and retain talent, achievement of performance metrics, if any, with respect to certain equity awards, the extent of option exercise activity, forfeiture rates, and other factors described in this Proxy Statement.

Key Features of the Amended 2018 Plan

The Amended 2018 Plan includes provisions that are designed to protect our stockholders' interests and to reflect corporate governance best practices, including the following:

- *Fungible share counting.* The Amended 2018 Plan contains a “fungible share counting” structure, whereby the number of shares of our common stock available for issuance under the Amended 2018 Plan will be reduced by (i) one share for each share issued pursuant to a stock option or stock appreciation right with an exercise price that is at least 100% of the fair market value of our common stock on the date of grant, referred to as an Appreciation Award, granted under the Amended 2018 Plan and (ii) 1.33 shares for each share issued pursuant to an award that is not an Appreciation Award, referred to as a Full Value Award, granted under the Amended 2018 Plan. As part of such fungible share counting structure, the number of shares of our common stock available for issuance under the Amended 2018 Plan will be increased by (i) one share for each share that becomes available again for issuance under the terms of the Amended 2018 Plan subject to an Appreciation Award and (ii) 1.33 shares for each share that becomes available again for issuance under the terms of the Amended 2018 Plan subject to a Full Value Award.
- *Minimum vesting.* The Amended 2018 Plan contains a minimum vesting requirement for all awards, such that no award may vest until at least 12 months following the date of grant of such award, except that shares up to 5% of the share reserve of the Amended 2018 Plan may be issued pursuant to awards that do not meet such vesting requirements.
- *No liberal change in control definition.* The change in control definition in the Amended 2018 Plan is not a “liberal” definition. A change in control transaction must actually occur in order for the change in control provisions in the Amended 2018 Plan to be triggered.
- *Repricing is not allowed.* The Amended 2018 Plan prohibits the repricing of outstanding stock options and stock appreciation rights and the cancellation of any outstanding stock options or stock appreciation rights that have an exercise or strike price greater than the then-current fair market value of our common stock in exchange for cash or other awards under the Amended 2018 Plan without prior stockholder approval.
- *Stockholder approval is required for additional shares.* The Amended 2018 Plan does not contain an annual “evergreen” provision. The Amended 2018 Plan authorizes a fixed number of shares, so that stockholder approval is required to issue any additional shares, allowing our stockholders to have direct input on our equity compensation program.

- *Awards subject to forfeiture/clawback.* Awards granted under the Amended 2018 Plan will be subject to recoupment in accordance with any clawback policy that we are required to adopt pursuant to the listing standards of any national securities exchange or association on which our securities are listed or as is otherwise required by the Dodd-Frank Wall Street Reform and Consumer Protection Act or other applicable law, and any other clawback policy that we adopt. In addition, we may impose other clawback, recovery or recoupment provisions in an award agreement, including a reacquisition right in respect of previously acquired shares or other cash or property upon the occurrence of cause.
- *No discounted stock options or stock appreciation rights.* All stock options and stock appreciation rights granted under the Amended 2018 Plan must have an exercise or strike price equal to or greater than the fair market value of our common stock on the date the stock option or stock appreciation right is granted.
- *Material amendments require stockholder approval.* Consistent with Nasdaq rules, the Amended 2018 Plan requires stockholder approval of any material revisions to the Amended 2018 Plan. In addition, certain other amendments to the Amended 2018 Plan require stockholder approval.
- *No liberal share counting provisions.* The following shares will not become available again for issuance under the Amended 2018 Plan: (i) any shares that are reacquired or withheld (or not issued) by us to satisfy the exercise or purchase price of an award; (ii) any shares that are reacquired or withheld (or not issued) by us to satisfy a tax withholding obligation in connection with an award; (iii) any shares repurchased by us on the open market with the proceeds of the exercise or purchase price of an award; and (iv) in the event that a stock appreciation right is settled in shares, the gross number of shares subject to such award.
- *Restrictions on dividends.* The Amended 2018 Plan provides that dividends or dividend equivalents may not be paid or credited to stock options or stock appreciation rights. In addition, with respect to any award other than a stock option or stock appreciation right, the Amended 2018 Plan provides that (i) no dividends or dividend equivalents may be paid with respect to any shares of our common stock subject to such award before the date such shares have vested, (ii) any dividends or dividend equivalents that are credited with respect to any such shares will be subject to all of the terms and conditions applicable to such shares under the terms of the applicable award agreement (including any vesting conditions), and (iii) any dividends or dividend equivalents that are credited with respect to any such shares will be forfeited to us on the date such shares are forfeited to or repurchased by us due to a failure to vest.

Description of the Amended 2018 Plan

The material features of the Amended 2018 Plan are described below. The following description of the Amended 2018 Plan is a summary only and is qualified in its entirety by reference to the complete text of the Amended 2018 Plan. Stockholders are urged to read the actual text of the Amended 2018 Plan in its entirety, which is attached to this Proxy Statement as Appendix A.

Purpose

The Amended 2018 Plan is designed to secure and retain the services of our employees, non-employee directors and consultants, provide incentives for our employees, non-employee directors and consultants to exert maximum efforts for the success of our company and our affiliates, and provide a means by which our employees, non-employee directors and consultants may be given an opportunity to benefit from increases in the value of our common stock. The Amended 2018 Plan is also designed to align employees' interests with stockholder interests.

Types of Awards

The terms of the Amended 2018 Plan provide for the grant of incentive stock options, nonstatutory stock options, stock appreciation rights, restricted stock awards, RSU awards, performance stock awards, and other stock awards.

Shares Available for Awards

Subject to adjustment for certain changes in our capitalization, the aggregate number of shares of our common stock that may be issued under the Amended 2018 Plan will not exceed the sum of: (i) 1,703,964 shares (which is the number of shares that were available for the grant of new awards under the Company's Amended and Restated 2013 Stock Incentive Plan, or the 2013 Plan, as of immediately prior to the effective date of the 2018 Plan); (ii) 8,800,000 shares (which is the number of additional shares

that were reserved as of the effective date of the 2018 Plan); (iii) 9,900,000 newly requested shares; and (iv) any Prior Plans' Returning Shares (as defined below), as such shares become available from time to time.

The number of shares of our common stock available for issuance under the Amended 2018 Plan will be reduced by: (i) one share for each share of common stock issued pursuant to an Appreciation Award granted under the Amended 2018 Plan; and (ii) 1.33 shares for each share of common stock issued pursuant to a Full Value Award granted under the Amended 2018 Plan.

The number of shares of our common stock available for issuance under the Amended 2018 Plan will be increased by: (i) one share for each Prior Plans' Returning Share or Amended 2018 Plan Returning Share (each as defined below) subject to an Appreciation Award and (ii) 1.33 shares for each Prior Plans' Returning Share or Amended 2018 Plan Returning Share (each as defined below) subject to a Full Value Award.

The "Prior Plans' Returning Shares" are shares of our common stock subject to outstanding stock awards granted under the 2013 Plan or the Company's 2004 Stock Incentive Plan (each referred to herein as a "Prior Plan") and that following the effective date of the 2018 Plan: (i) are not issued because the stock award expires or otherwise terminates without all of the shares covered by the stock award having been issued or is settled in cash, or (ii) are forfeited back to or repurchased by us because of the failure to meet a contingency or condition required for the vesting of such shares.

The following actions will not result in an issuance of shares of our common stock under the Amended 2018 Plan and accordingly will not reduce the number of shares of our common stock available for issuance under the Amended 2018 Plan: (i) the expiration or termination of any portion of an award granted under the Amended 2018 Plan without the shares covered by such portion of the award having been issued; or (ii) the settlement of any portion of an award granted under the Amended 2018 Plan in cash.

If any shares of our common stock issued pursuant to an award granted under the Amended 2018 Plan are forfeited back to or repurchased by us because of the failure to meet a contingency or condition required for the vesting of such shares, then such shares will become available again for issuance under the Amended 2018 Plan and, for purposes of this Proposal No. 3, such shares will be the "Amended 2018 Plan Returning Shares."

The following shares of common stock will not become available again for issuance under the Amended 2018 Plan: (i) any shares that are reacquired or withheld (or not issued) by us to satisfy the exercise or purchase price of an award granted under the Prior Plans or the Amended 2018 Plan (including any shares subject to such award that are not delivered because such award is exercised through a reduction of shares subject to such award); (ii) any shares that are reacquired or withheld (or not issued) by us to satisfy a tax withholding obligation in connection with an award granted under the Prior Plans or the Amended 2018 Plan; (iii) any shares repurchased by us on the open market with the proceeds of the exercise or purchase price of an award granted under the Prior Plans or the Amended 2018 Plan; and (iv) in the event that a stock appreciation right granted under the Prior Plans or the Amended 2018 Plan is settled in shares, the gross number of shares subject to such award.

Eligibility

All of our (including our affiliates') employees, non-employee directors and consultants are eligible to participate in the Amended 2018 Plan and may receive all types of awards other than incentive stock options. Incentive stock options may be granted under the Amended 2018 Plan only to our (including our affiliates') employees. However, participation in the automatic grant program is limited to our non-employee directors (see "—Automatic Grant Program for Non-Employee Directors" below).

As of March 20, 2020, we (including our affiliates) had approximately 350 employees, eight non-employee directors and approximately 90 consultants.

Administration

Our Compensation Committee administers the Amended 2018 Plan (except the automatic grant program, which is administered by our Board, subject to the terms of such program) and may delegate authority to administer the Amended 2018 Plan to a subcommittee of non-employee directors. Our Compensation Committee may, at any time, revest in itself some or all of the power delegated to such a committee. The Compensation Committee and any other committee of non-employee directors to whom the Compensation Committee may delegate authority to administer the Amended 2018 Plan are each considered to be a Plan Administrator for purposes of this Proposal No. 3. Subject to the terms of the Amended 2018 Plan, the Plan Administrator may determine the recipients, the types of awards to be granted, the number of shares of our common stock subject to or the cash value of awards, and the terms and conditions of awards granted under the Amended 2018 Plan, including the period of their exercisability and vesting, subject to the minimum vesting requirement described under "—Minimum Vesting Requirement" below. The Plan Administrator also has the authority to provide for accelerated exercisability and vesting of awards. Subject to the limitations set forth below, the Plan Administrator also determines the fair market value applicable to an award and the exercise or strike price of stock options and stock appreciation rights granted under the Amended 2018 Plan.

The Plan Administrator may also delegate to one or more executive officers the authority to designate employees who are not executive officers to be recipients of certain awards and the number of shares of our common stock subject to such awards.

Under any such delegation, the Plan Administrator will specify the total number of shares of our common stock that may be subject to the awards granted by such executive officer. The executive officer may not grant an award to himself or herself.

Repricing; Cancellation and Re-Grant of Stock Options or Stock Appreciation Rights

Under the Amended 2018 Plan, the Plan Administrator does not have the authority to reprice any outstanding stock option or stock appreciation right by reducing the exercise or strike price of the stock option or stock appreciation right or to cancel any outstanding stock option or stock appreciation right that has an exercise or strike price greater than the then-current fair market value of our common stock in exchange for cash or other awards without obtaining the approval of our stockholders. Such approval must be obtained within 12 months prior to such an event.

Minimum Vesting Requirement

Under the Amended 2018 Plan, no award may vest until at least 12 months following the date of grant of such award, except that shares up to 5% of the share reserve of the Amended 2018 Plan may be issued pursuant to awards that do not meet such vesting requirements.

Dividends and Dividend Equivalents

The Amended 2018 Plan provides that dividends or dividend equivalents may not be paid or credited to stock options or stock appreciation rights.

With respect to any award other than a stock option or stock appreciation right, the Amended 2018 Plan provides that dividends or dividend equivalents may be paid or credited with respect to any shares of our common stock subject to such award, as determined by the Plan Administrator and specified in the applicable award agreement; *provided, however*, that (i) no dividends or dividend equivalents may be paid with respect to any such shares before the date such shares have vested under the terms of such award agreement, (ii) any dividends or dividend equivalents that are credited with respect to any such shares will be subject to all of the terms and conditions applicable to such shares under the terms of such award agreement (including, but not limited to, any vesting conditions), and (iii) any dividends or dividend equivalents that are credited with respect to any such shares will be forfeited to us on the date such shares are forfeited to or repurchased by us due to a failure to vest.

Stock Options

Stock options may be granted under the Amended 2018 Plan pursuant to stock option agreements. The Amended 2018 Plan permits the grant of stock options that are intended to qualify as incentive stock options, or ISOs, and NSOs.

The exercise price of a stock option granted under the Amended 2018 Plan may not be less than 100% of the fair market value of the common stock subject to the stock option on the date of grant and, in some cases (see “—Limitations on Incentive Stock Options” below), may not be less than 110% of such fair market value.

The term of stock options granted under the Amended 2018 Plan may not exceed ten years from the date of grant and, in some cases (see “—Limitations on Incentive Stock Options” below), may not exceed five years from the date of grant. Except as otherwise provided in a participant’s stock option agreement or other written agreement with us or one of our affiliates, if a participant’s service relationship with us or any of our affiliates (referred to in this Proposal No. 3 as “continuous service”) terminates (other than for cause or the participant’s death or disability), the participant may exercise any vested stock options for up to three months following the participant’s termination of continuous service. Except as otherwise provided in a participant’s stock option agreement or other written agreement with us or one of our affiliates, if a participant’s continuous service terminates due to the participant’s disability, the participant may exercise any vested stock options for up to 12 months following the participant’s termination due to the participant’s disability. Except as otherwise provided in a participant’s stock option agreement or other written agreement with us or one of our affiliates, if a participant’s continuous service terminates due to the participant’s death (or the participant dies within a specified period following termination of continuous service), the participant’s beneficiary may exercise any vested stock options for up to 18 months following the participant’s death. Except as explicitly provided otherwise in a participant’s stock option agreement or other written agreement with us or one of our affiliates, if a participant’s continuous service is terminated for cause (as defined in the Amended 2018 Plan), all stock options held by the participant will terminate upon the participant’s termination of continuous service and the participant will be prohibited from exercising any stock option from and after such termination date. Except as otherwise provided in a participant’s stock option agreement or other written agreement with us or one of our affiliates, the term of a stock option may be extended if a participant’s continuous service terminates for any reason other than for cause and, at any time during the last 30 days of the applicable post-termination exercise period, the exercise of the stock option would be prohibited by applicable laws or the sale of any common stock received upon such exercise would violate our insider trading policy. In no event, however, may a stock option be exercised after its original expiration date.

Acceptable forms of consideration for the purchase of our common stock pursuant to the exercise of a stock option under the Amended 2018 Plan will be determined by the Plan Administrator and may include payment: (i) by cash, check, bank draft or money order payable to us; (ii) pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board;

(iii) by delivery to us of shares of our common stock (either by actual delivery or attestation); (iv) by a net exercise arrangement (for NSOs only); or (v) in other legal consideration approved by the Plan Administrator.

Stock options granted under the Amended 2018 Plan may become exercisable in cumulative increments, or “vest,” as determined by the Plan Administrator at the rate specified in the stock option agreement, subject to the minimum vesting requirement described under “—Minimum Vesting Requirement” above. Shares covered by different stock options granted under the Amended 2018 Plan may be subject to different vesting schedules as the Plan Administrator may determine.

The Plan Administrator may impose limitations on the transferability of stock options granted under the Amended 2018 Plan in its discretion. Generally, a participant may not transfer a stock option granted under the Amended 2018 Plan other than by will or the laws of descent and distribution or, subject to approval by the Plan Administrator, pursuant to a domestic relations order or an official marital settlement agreement. However, the Plan Administrator may permit transfer of a stock option in a manner that is not prohibited by applicable tax and securities laws. In addition, subject to approval by the Plan Administrator, a participant may designate a beneficiary who may exercise the stock option following the participant’s death. Options may not be transferred to a third party financial institution for value.

Limitations on Incentive Stock Options

In accordance with current federal tax laws, the aggregate fair market value, determined at the time of grant, of shares of our common stock with respect to ISOs that are exercisable for the first time by a participant during any calendar year under all of our stock plans may not exceed \$100,000. The stock options or portions of stock options that exceed this limit or otherwise fail to qualify as ISOs are treated as NSOs. No ISO may be granted to any person who, at the time of grant, owns or is deemed to own stock possessing more than 10% of our total combined voting power unless the following conditions are satisfied:

- the exercise price of the ISO must be at least 110% of the fair market value of the common stock subject to the ISO on the date of grant; and
- the term of the ISO must not exceed five years from the date of grant.

Subject to adjustment for certain changes in our capitalization, the aggregate maximum number of shares of our common stock that may be issued pursuant to the exercise of ISOs under the Amended 2018 Plan is 37,400,000 shares.

Stock Appreciation Rights

Stock appreciation rights may be granted under the Amended 2018 Plan pursuant to stock appreciation right agreements. Each stock appreciation right is denominated in common stock share equivalents. The strike price of each stock appreciation right will be determined by the Plan Administrator, but will in no event be less than 100% of the fair market value of the common stock subject to the stock appreciation right on the date of grant. The term of stock appreciation rights granted under the Amended 2018 Plan may not exceed ten years from the date of grant. The Plan Administrator may also impose restrictions or conditions upon the vesting of stock appreciation rights that it deems appropriate, subject to the minimum vesting requirement described under “—Minimum Vesting Requirement” above. The appreciation distribution payable upon exercise of a stock appreciation right may be paid in shares of our common stock, in cash, in a combination of cash and stock, or in any other form of consideration determined by the Plan Administrator and set forth in the stock appreciation right agreement. Stock appreciation rights will be subject to the same conditions upon termination of continuous service and restrictions on transfer as stock options under the Amended 2018 Plan.

Restricted Stock Awards

Restricted stock awards may be granted under the Amended 2018 Plan pursuant to restricted stock award agreements. A restricted stock award may be granted in consideration for cash, check, bank draft or money order payable to us, the participant’s services performed for us, or any other form of legal consideration acceptable to the Plan Administrator. Shares of our common stock acquired under a restricted stock award may be subject to forfeiture to or repurchase by us in accordance with a vesting schedule to be determined by the Plan Administrator, subject to the minimum vesting requirement described under “—Minimum Vesting Requirement” above. Rights to acquire shares of our common stock under a restricted stock award may be transferred only upon such terms and conditions as are set forth in the restricted stock award agreement. Upon a participant’s termination of continuous service for any reason, any shares subject to restricted stock awards held by the participant that have not vested as of such termination date may be forfeited to or repurchased by us.

Restricted Stock Unit Awards

RSU awards may be granted under the Amended 2018 Plan pursuant to RSU award agreements. Payment of any purchase price may be made in any form of legal consideration acceptable to the Plan Administrator. A RSU award may be settled by the delivery of shares of our common stock, in cash, in a combination of cash and stock, or in any other form of consideration determined

by the Plan Administrator and set forth in the RSU award agreement. RSU awards may be subject to vesting in accordance with a vesting schedule to be determined by the Plan Administrator, subject to the minimum vesting requirement described under “-Minimum Vesting Requirement” above. Except as otherwise provided in a participant’s RSU award agreement or other written agreement with us or one of our affiliates, RSUs that have not vested will be forfeited upon the participant’s termination of continuous service for any reason.

Performance Stock Awards

The Amended 2018 Plan allows us to grant performance stock awards. A performance stock award is a stock award that is payable (including that may vest or may be exercised) contingent upon the attainment of pre-determined performance goals during a performance period. A performance stock award may require the completion of a specified period of continuous service. The length of any performance period, the performance goals to be achieved during the performance period, and the measure of whether and to what degree such performance goals have been attained will be determined by the Plan Administrator in its discretion. In addition, to the extent permitted by applicable law and the applicable award agreement, the Plan Administrator may determine that cash may be used in payment of performance stock awards.

Performance goals under the Amended 2018 Plan will be based on any one or more of the following performance criteria: (i) earnings (including earnings per share and net earnings); (ii) earnings before interest, taxes and depreciation; (iii) earnings before interest, taxes, depreciation and amortization; (iv) earnings before interest, taxes, depreciation, amortization and legal settlements; (v) earnings before interest, taxes, depreciation, amortization, legal settlements and other income (expense); (vi) earnings before interest, taxes, depreciation, amortization, legal settlements, other income (expense) and stock-based compensation; (vii) earnings before interest, taxes, depreciation, amortization, legal settlements, other income (expense), stock-based compensation and changes in deferred revenue; (viii) total stockholder return; (ix) return on equity or average stockholder’s equity; (x) return on assets, investment, or capital employed; (xi) stock price; (xii) profit (including gross profit) and/or margin (including gross margin); (xiii) income (before or after taxes); (xiv) operating income; (xv) operating income after taxes; (xvi) pre-tax profit; (xvii) operating cash flow; (xviii) sales or revenue targets; (xix) increases in revenue or product revenue; (xx) expenses and cost reduction goals; (xxi) improvement in or attainment of working capital levels; (xxii) economic value added (or an equivalent metric); (xxiii) market share; (xxiv) cash flow; (xxv) cash flow per share; (xxvi) share price performance; (xxvii) debt reduction; (xxviii) implementation or completion of projects or processes; (xxix) employee retention; (xxx) stockholders’ equity; (xxxi) capital expenditures; (xxxii) debt levels; (xxxiii) operating profit or net operating profit; (xxxiv) workforce diversity; (xxxv) growth of net income or operating income; (xxxvi) billings; (xxxvii) bookings; and (xxxviii) other measures of performance selected by the Plan Administrator.

Performance goals may be based on a company-wide basis, with respect to one or more business units, divisions, affiliates, or business segments, and in either absolute terms or relative to the performance of one or more comparable companies or the performance of one or more relevant indices. Unless specified otherwise by the Plan Administrator in the award agreement at the time the award is granted or in such other document setting forth the performance goals at the time the performance goals are established, the Plan Administrator will appropriately make adjustments in the method of calculating the attainment of performance goals for a performance period as follows: (i) to exclude restructuring and/or other nonrecurring charges; (ii) to exclude exchange rate effects; (iii) to exclude the effects of changes to generally accepted accounting principles; (iv) to exclude the effects of any statutory adjustments to corporate tax rates; (v) to exclude the effects of items that are “unusual” in nature or occur “infrequently” as determined under generally accepted accounting principles; (vi) to exclude the dilutive effects of acquisitions or joint ventures; (vii) to assume that any business divested by us achieved performance objectives at targeted levels during the balance of a performance period following such divestiture; (viii) to exclude the effect of any change in the outstanding shares of our common stock by reason of any stock dividend or split, stock repurchase, reorganization, recapitalization, merger, consolidation, spin-off, combination or exchange of shares or other similar corporate change, or any distributions to common stockholders other than regular cash dividends; (ix) to exclude the effects of stock based compensation and the award of bonuses under our bonus plans; (x) to exclude costs incurred in connection with potential acquisitions or divestitures that are required to be expensed under generally accepted accounting principles; and (xi) to exclude the goodwill and intangible asset impairment charges that are required to be recorded under generally accepted accounting principles.

In addition, the Plan Administrator retains the discretion to reduce or eliminate the compensation or economic benefit due upon the attainment of any performance goals and to define the manner of calculating the performance criteria it selects to use for a performance period.

Automatic Grant Program for Non-Employee Directors

Under the automatic grant program, each individual who is a non-employee Board member will automatically be granted a NSO to purchase 20,000 shares of common stock and a RSU award in respect of 10,000 shares of common stock on an annual basis as follows: (i) with respect to 2020, such annual awards will be granted on the date of the 2020 Annual Meeting; and (ii) with respect to each year following 2020, such annual awards will be granted on the 25th day of February of such year (or if such 25th day is not a trading day, the immediately preceding trading day in February); in each case, provided that such individual is a non-

employee Board member on the date of grant, has served as a non-employee Board member for at least three months prior to the date of grant, and will continue serving as a non-employee Board member immediately after the date of grant. The shares subject to each annual 20,000 share automatic NSO grant made to a continuing Board member will vest in 12 successive equal monthly installments over the one-year period following the date of grant, subject to the director's continuous service through the applicable vesting dates. The shares subject to each annual 10,000 share automatic RSU award grant made to a continuing Board member in 2020 will fully vest on the earlier of (x) the first anniversary of the date of grant or (y) the day prior to the next annual stockholders meeting, subject to the director's continuous service through the applicable vesting date. The shares subject to each annual 10,000 share automatic RSU award grant made to a continuing Board member following 2020 will fully vest on the first anniversary of the date of grant, subject to the director's continuous service through the applicable vesting date.

Under the automatic grant program, each individual who is initially appointed or elected as a non-employee Board member on or after the 2020 Annual Meeting will, on the date of such appointment or election, automatically be granted a NSO to purchase 30,000 shares of common stock and a RSU award in respect of 15,000 shares of common stock. The shares subject to each initial 30,000 share automatic NSO grant made to a newly appointed or elected Board member will vest in 36 successive equal monthly installments over the three-year period following the date of grant, subject to the director's continuous service through the applicable vesting dates. The shares subject to each initial 15,000 share automatic RSU award grant made to a newly appointed or elected Board member will vest in three equal annual installments over the three-year period following the date of grant, subject to the director's continuous service through the applicable vesting dates.

Each automatic NSO grant will have an exercise price per share equal to the fair market value per share of our common stock on the grant date and will have a term of 10 years, subject to earlier termination following the director's termination of continuous service. Each automatic NSO grant will be immediately exercisable for all of the option shares; however, we may repurchase, at the lower of the exercise price paid per share or the fair market value per share, any shares purchased under the NSO that are not vested at the time of the director's termination of continuous service.

The shares subject to each automatic NSO grant and each automatic RSU award grant will immediately vest in full upon the director's termination of continuous service due to death or disability, or upon the occurrence of a change in control or hostile takeover (each as defined in the Amended 2018 Plan and described below), subject to the director's continuous service through the date of such change in control or hostile takeover.

Other Stock Awards

Other forms of stock awards valued in whole or in part by reference to, or otherwise based on, our common stock may be granted either alone or in addition to other awards under the Amended 2018 Plan. Subject to the terms of the Amended 2018 Plan, the Plan Administrator will have sole and complete authority to determine the persons to whom and the time or times at which such other stock awards will be granted, the number of shares of our common stock to be granted and all other terms and conditions of such other stock awards.

Clawback Policy

Awards granted under the Amended 2018 Plan will be subject to recoupment in accordance with any clawback policy that we are required to adopt pursuant to the listing standards of any national securities exchange or association on which our securities are listed or as is otherwise required by the Dodd-Frank Wall Street Reform and Consumer Protection Act or other applicable law, and any other clawback policy that we adopt. In addition, the Plan Administrator may impose other clawback, recovery or recoupment provisions in an award agreement as the Plan Administrator determines necessary or appropriate, including a reacquisition right in respect of previously acquired shares of our common stock or other cash or property upon the occurrence of cause.

Changes to Capital Structure

In the event of certain capitalization adjustments, the Plan Administrator will appropriately adjust: (i) the class(es) and maximum number of securities subject to the Amended 2018 Plan; (ii) the class(es) and maximum number of securities that may be issued pursuant to the exercise of ISOs; (iii) the class(es) and number of securities to be granted under the automatic grant program; and (iv) the class(es) and number of securities and price per share of stock subject to outstanding awards.

Change in Control or Hostile Takeover

The following provisions will apply to awards under the Amended 2018 Plan in the event of a change in control (as defined in the Amended 2018 Plan and described below) unless otherwise provided in the instrument evidencing the award or any other written agreement with us or one of our affiliates or unless otherwise expressly provided by the Plan Administrator at the time of grant of the award.

In the event of a change in control, outstanding awards shall be assumed, continued or substituted for similar stock awards by the surviving or acquiring corporation (or its parent company). If the surviving or acquiring corporation (or its parent company) fails to assume, continue or substitute such awards, the vesting of awards held by participants who are our employees or non-

employee directors and whose continuous service has not terminated will be accelerated in full to a date prior to the change in control as determined by the Plan Administrator. All awards not assumed, continued or substituted for similar stock awards by the surviving or acquiring corporation (or its parent company) will terminate if not exercised (if applicable) upon the change in control. In addition, the Plan Administrator may also provide, in its sole discretion, that the holder of an award that will terminate if not exercised prior to the occurrence of a change in control may not exercise such award but instead will receive a payment, in such form as may be determined by the Plan Administrator, equal to the excess, if any, of (1) the value of the property the participant would have received upon exercise of the award (including, at the discretion of the Plan Administrator, any unvested portion of such award) over (2) the exercise price otherwise payable in connection with the award.

For purposes of the Amended 2018 Plan, a change in control generally will be deemed to occur if (1) we are acquired pursuant to a merger, consolidation or other reorganization approved by our stockholders, (2) there occurs a stockholder-approved sale or other disposition of all or substantially all our assets, or (3) there occurs any transaction or series of related transactions pursuant to which any person or group of related persons becomes directly or indirectly the beneficial owner of securities possessing (or convertible into or exercisable for securities possessing) more than 50% of the total combined voting power of our securities outstanding immediately after the consummation of such transaction or series of related transactions, whether such transaction involves a direct issuance from us or the acquisition of outstanding securities held by one or more of our stockholders.

The awards granted to our non-employee directors under our automatic grant program will automatically immediately fully accelerate vesting upon a change in control or hostile takeover (as defined in the Amended 2018 Plan and described below), subject to the director's continuous service through the date of such change in control or hostile takeover. The acceleration of vesting of an award in the event of a change in control or hostile takeover under the Amended 2018 Plan may be viewed as an anti-takeover provision, which may have the effect of discouraging a proposal to acquire or otherwise obtain control of us.

For purposes of the Amended 2018 Plan, a hostile takeover generally will be deemed to occur if (1) there is a change in the majority of our Board as a result of one or more contested elections for Board membership, or (2) securities possessing more than 50% of the total combined voting power of our outstanding securities are acquired pursuant to a hostile tender offer.

Plan Amendments and Termination

The Plan Administrator will have the authority to amend or terminate the Amended 2018 Plan at any time. However, except as otherwise provided in the Amended 2018 Plan, no amendment or termination of the Amended 2018 Plan may impair a participant's rights under his or her outstanding awards without the participant's consent. We will obtain stockholder approval of any amendment to the Amended 2018 Plan as required by applicable law and listing requirements. No incentive stock options may be granted under the Amended 2018 Plan after April 23, 2028, which is the tenth anniversary of the date the 2018 Plan was first approved by the Compensation Committee.

U.S. Federal Income Tax Consequences

The following is a summary of the principal United States federal income tax consequences to participants and us with respect to participation in the Amended 2018 Plan. This summary is not intended to be exhaustive and does not discuss the income tax laws of any local, state or foreign jurisdiction in which a participant may reside. The information is based upon current federal income tax rules and therefore is subject to change when those rules change. Because the tax consequences to any participant may depend on his or her particular situation, each participant should consult the participant's tax adviser regarding the federal, state, local and other tax consequences of the grant or exercise of an award or the disposition of stock acquired under the Amended 2018 Plan. The Amended 2018 Plan is not qualified under the provisions of Section 401(a) of the Internal Revenue Code of 1986, as amended, or the Code, and is not subject to any of the provisions of the Employee Retirement Income Security Act of 1974. Our ability to realize the benefit of any tax deductions described below depends on our generation of taxable income as well as the requirement of reasonableness and the satisfaction of our tax reporting obligations.

Nonstatutory Stock Options

Generally, there is no taxation upon the grant of an NSO if the stock option is granted with an exercise price equal to the fair market value of the underlying stock on the grant date. Upon exercise, a participant will recognize ordinary income equal to the excess, if any, of the fair market value of the underlying stock on the date of exercise of the stock option over the exercise price. If the participant is employed by us or one of our affiliates, that income will be subject to withholding taxes. The participant's tax basis in those shares will be equal to his or her fair market value on the date of exercise of the stock option, and the participant's capital gain holding period for those shares will begin on that date.

Subject to the requirement of reasonableness, the provisions of Section 162(m) of the Code, and the satisfaction of a tax reporting obligation, we will generally be entitled to a tax deduction equal to the taxable ordinary income realized by the participant.

Incentive Stock Options

The Amended 2018 Plan provides for the grant of stock options that are intended to qualify as “incentive stock options,” as defined in Section 422 of the Code. Under the Code, a participant generally is not subject to ordinary income tax upon the grant or exercise of an ISO. If the participant holds a share received upon exercise of an ISO for more than two years from the date the stock option was granted and more than one year from the date the stock option was exercised, which is referred to as the required holding period, the difference, if any, between the amount realized on a sale or other taxable disposition of that share and the participant’s tax basis in that share will be long-term capital gain or loss.

If, however, a participant disposes of a share acquired upon exercise of an ISO before the end of the required holding period, which is referred to as a disqualifying disposition, the participant generally will recognize ordinary income in the year of the disqualifying disposition equal to the excess, if any, of the fair market value of the share on the date of exercise of the stock option over the exercise price. However, if the sales proceeds are less than the fair market value of the share on the date of exercise of the stock option, the amount of ordinary income recognized by the participant will not exceed the gain, if any, realized on the sale. If the amount realized on a disqualifying disposition exceeds the fair market value of the share on the date of exercise of the stock option, that excess will be short-term or long-term capital gain, depending on whether the holding period for the share exceeds one year.

For purposes of the alternative minimum tax, the amount by which the fair market value of a share of stock acquired upon exercise of an ISO exceeds the exercise price of the stock option generally will be an adjustment included in the participant’s alternative minimum taxable income for the year in which the stock option is exercised. If, however, there is a disqualifying disposition of the share in the year in which the stock option is exercised, there will be no adjustment for alternative minimum tax purposes with respect to that share. In computing alternative minimum taxable income, the tax basis of a share acquired upon exercise of an ISO is increased by the amount of the adjustment taken into account with respect to that share for alternative minimum tax purposes in the year the stock option is exercised.

We are not allowed a tax deduction with respect to the grant or exercise of an ISO or the disposition of a share acquired upon exercise of an ISO after the required holding period. If there is a disqualifying disposition of a share, however, we will generally be entitled to a tax deduction equal to the taxable ordinary income realized by the participant, subject to the requirement of reasonableness, the provisions of Section 162(m) of the Code, and provided that either the employee includes that amount in income or we timely satisfy our reporting requirements with respect to that amount.

Restricted Stock Awards

Generally, the recipient of a restricted stock award will recognize ordinary income at the time the stock is received equal to the excess, if any, of the fair market value of the stock received over any amount paid by the recipient in exchange for the stock. If, however, the stock is not vested when it is received (for example, if the employee is required to work for a period of time in order to have the right to sell the stock), the recipient generally will not recognize income until the stock becomes vested, at which time the recipient will recognize ordinary income equal to the excess, if any, of the fair market value of the stock on the date it becomes vested over any amount paid by the recipient in exchange for the stock. A recipient may, however, file an election with the Internal Revenue Service, within 30 days following his or her receipt of the restricted stock award, to recognize ordinary income, as of the date the recipient receives the restricted stock award, equal to the excess, if any, of the fair market value of the stock on the date the restricted stock award is granted over any amount paid by the recipient for the stock.

The recipient’s basis for the determination of gain or loss upon the subsequent disposition of shares acquired from a restricted stock award will be the amount paid for such shares plus any ordinary income recognized either when the stock is received or when the stock becomes vested.

Subject to the requirement of reasonableness, the provisions of Section 162(m) of the Code, and the satisfaction of a tax reporting obligation, we will generally be entitled to a tax deduction equal to the taxable ordinary income realized by the recipient of the restricted stock award.

Restricted Stock Unit Awards

Generally, the recipient of a RSU award structured to comply with the requirements of Section 409A of the Code or an exception to Section 409A of the Code will recognize ordinary income at the time the stock is delivered equal to the excess, if any, of the fair market value of the stock received over any amount paid by the recipient in exchange for the stock. To comply with the requirements of Section 409A of the Code, the stock subject to a RSU award may generally only be delivered upon one of the following events: a fixed calendar date (or dates), separation from service, death, disability or a change in control. If delivery occurs on another date, unless the RSU award otherwise complies with or qualifies for an exception to the requirements of Section 409A of the Code (including delivery upon achievement of a performance goal), in addition to the tax treatment described above, the recipient will owe an additional 20% federal tax and interest on any taxes owed.

The recipient's basis for the determination of gain or loss upon the subsequent disposition of shares acquired from a RSU award will be the amount paid for such shares plus any ordinary income recognized when the stock is delivered.

Subject to the requirement of reasonableness, the provisions of Section 162(m) of the Code, and the satisfaction of a tax reporting obligation, we will generally be entitled to a tax deduction equal to the taxable ordinary income realized by the recipient of the RSU award.

Stock Appreciation Rights

Generally, if a stock appreciation right is granted with an exercise price equal to the fair market value of the underlying stock on the grant date, the recipient will recognize ordinary income equal to the fair market value of the stock or cash received upon such exercise. Subject to the requirement of reasonableness, the provisions of Section 162(m) of the Code, and the satisfaction of a tax reporting obligation, we will generally be entitled to a tax deduction equal to the taxable ordinary income realized by the recipient of the stock appreciation right.

Section 162(m) Limitations

Under Section 162(m) of the Code, compensation paid to any publicly held corporation's "covered employees" that exceeds \$1 million per taxable year for any covered employee is generally non-deductible. Awards granted under the Amended 2018 Plan will be subject to the deduction limit under Section 162(m) of the Code and will not be eligible to qualify for the performance-based compensation exception under Section 162(m) of the Code pursuant to the transition relief provided by the Tax Cuts and Jobs Act. For further information regarding the deduction limit under Section 162(m) of the Code and such transition relief, see the section entitled "Compensation Discussion and Analysis—Additional Compensation Information—Tax and Accounting Effects of Executive Compensation."

New Plan Benefits under Amended 2018 Plan

The following table sets forth certain information regarding future benefits under the Amended 2018 Plan.

Name and Position	Number of Shares
Alexander D. Macrae President and Chief Executive Officer	(1)
Sung H. Lee Executive Vice President and Chief Financial Officer	(1)
Stephane Boissel Executive Vice President, Corporate Strategy and Interim Chief Financial Officer, June 2019 to October 2019	(1)
Adrian Woolfson Executive Vice President, Research and Development	(1)
Gary H. Loeb Executive Vice President, General Counsel and Secretary	(1)
R. Andrew Ramelmeier Executive Vice President, Technical Operations	(1)
Kathy Y. Yi Former Executive Vice President and Chief Financial Officer	(1) (2)
All current executive officers as a group	(1)
All current directors who are not executive officers as a group	(3)
All current employees, including all current officers who are not executive officers, as a group	(1)

- (1) Awards granted under the Amended 2018 Plan to our executive officers and other employees are discretionary and are not subject to set benefits or amounts under the terms of the Amended 2018 Plan, and we have not granted any awards under the Amended 2018 Plan subject to stockholder approval of this Proposal No. 3. Accordingly, the benefits or amounts that will be received by or allocated to our executive officers and other employees under the Amended 2018 Plan are not determinable.
- (2) Ms. Yi resigned from her position of Executive Vice President and Chief Financial Officer effective June 7, 2019, and, therefore, is not eligible to receive any future awards under the Amended 2018 Plan.
- (3) As described above in this Proposal No. 3 under "—Automatic Grant Program for Non-Employee Directors," each individual who is a non-employee Board member will automatically be granted a NSO to purchase 20,000 shares of common stock and a RSU award in respect of 10,000 shares of common stock on an annual basis as follows: (i) with

respect to 2020, such annual awards will be granted on the date of the 2020 Annual Meeting; and (ii) with respect to each year following 2020, such annual awards will be granted on the 25th day of February of such year (or if such 25th day is not a trading day, the immediately preceding trading day in February); in each case, provided that such individual is a non-employee Board member on the date of grant, has served as a non-employee Board member for at least three months prior to the date of grant, and will continue serving as a non-employee Board member immediately after the date of grant. If this Proposal No. 3 is approved by our stockholders, then on and after the date of the 2020 Annual Meeting, any such NSOs and RSU awards will be granted under the Amended 2018 Plan. Under the current terms of the automatic grant program under the Amended 2018 Plan, the aggregate number of shares subject to such NSOs and RSU awards that will automatically be granted to all of our current directors who are not executive officers as a group will be 240,000 shares each year.

Plan Benefits under 2018 Plan

The following table sets forth, for each of the individuals and various groups indicated, the total number of shares of our common stock subject to awards that have been granted under the 2018 Plan as of March 20, 2020:

Name and Position	Number of Shares
Alexander D. Macrae President and Chief Executive Officer	949,000
Sung H. Lee Executive Vice President and Chief Financial Officer	456,250
Stephane Boissel Executive Vice President, Corporate Strategy and Interim Chief Financial Officer, June 2019 to October 2019	571,023
Adrian Woolfson Executive Vice President, Research and Development	400,000
Gary H. Loeb Executive Vice President, General Counsel and Secretary	400,000
R. Andrew Ramelmeier Executive Vice President, Technical Operations	252,500
Kathy Y. Yi Former Executive Vice President and Chief Financial Officer	134,750
All current executive officers as a group (1)	3,028,773
All current directors who are not executive officers as a group	297,500
Each nominee for election as a director:	
Robert F. Carey	35,000
Stephen G. Dilly	35,000
Alexander D. Macrae	949,000
John H. Markels	35,000
James R. Meyers	35,000
H. Stewart Parker	35,000
Saira Ramasastry	35,000
Karen L. Smith	52,500
Joseph S. Zakrzewski	35,000
Each associate of any executive officers, current directors or director nominees	—
Each other person who received or is to receive 5% of awards	—
All current employees, including all current officers who are not executive officers, as a group (1)	6,863,619

(1) Excludes Ms. Yi's shares because she resigned from her position as Executive Vice President and Chief Financial Officer effective June 7, 2019.

Vote Required

Approval of this Proposal No. 3 requires votes "FOR" from holders of a majority in voting power of the shares present in person or represented by proxy at the Annual Meeting and entitled to vote on Proposal No. 3.

RECOMMENDATION OF THE BOARD OF DIRECTORS

The Board of Directors recommends that the stockholders vote FOR the approval of the amendment and restatement of the Sangamo Therapeutics, Inc. 2018 Equity Incentive Plan.

PROPOSAL NO. 4:

APPROVAL OF CERTIFICATE OF AMENDMENT OF OUR SEVENTH AMENDED AND RESTATED CERTIFICATE OF INCORPORATION, AS AMENDED, TO INCREASE THE TOTAL NUMBER OF AUTHORIZED SHARES OF COMMON STOCK

Overview

The Board has determined that it is advisable and in Sangamo's best interests and in the best interests of our stockholders to amend our Seventh Amended and Restated Certificate of Incorporation, as amended, or the Restated Certificate, to increase the total number of authorized shares of common stock from 160,000,000 shares to 320,000,000 shares. On March 9, 2020, the Board adopted resolutions approving the proposed certificate of amendment of the Restated Certificate, or the Common Increase Certificate, in substantially the form attached as Appendix B hereto. At that time, the Board declared the proposed Common Increase Certificate to be advisable and in the best interests of Sangamo and our stockholders and is accordingly submitting the proposed Common Increase Certificate for approval by our stockholders.

If stockholders approve this Proposal No. 4, we expect to file the Common Increase Certificate with the Secretary of State of the State of Delaware to increase the number of authorized shares of our common stock as soon as practicable following stockholder approval. In this regard, upon filing of the Common Increase Certificate with the Secretary of State of the State of Delaware, Article IV, Paragraph A of the Restated Certificate would be amended as follows, with the proposed additions underlined and proposed deletions stricken through:

"A. Classes of Stock. The total number of shares of stock which the Corporation shall have authority to issue is ~~one hundred sixty-five million~~ three hundred twenty-five million (325,000,000), consisting of five million (5,000,000) shares of Preferred Stock, par value \$0.01 per share (the "Preferred Stock"), and ~~one hundred sixty million (160,000,000)~~ three hundred twenty million (320,000,000) shares of Common Stock, par value \$0.01 per share (the "Common Stock")."

As of the close of business on March 20, 2020, of our 160,000,000 authorized shares of common stock, there were 116,211,355 shares of common stock issued and outstanding. In addition to the 116,211,355 shares of common stock outstanding on March 20, 2020, there were 24,420,157 shares reserved for issuance pursuant to that certain stock purchase agreement we entered into on February 26, 2020 with Biogen MA, Inc. and the remainder of our authorized shares of common stock as of the close of business on March 20, 2020 have all been reserved for issuance under our various equity compensation plans, including the 2018 Plan. **Accordingly, at present, there are no available unissued and unreserved authorized shares of our common stock**, including to give effect to the proposed Share Reserve Amendment with respect to the Amended 2018 Plan that is part of Proposal No. 3. In this regard, the effectiveness of the Share Reserve Amendment and the ISO Limit Amendment that are part of Proposal No. 3 are contingent upon approval of this Proposal No. 4 by our stockholders. Accordingly:

- if Proposal No. 3 and this Proposal No. 4 are both approved by our stockholders, then the Amended 2018 Plan (including the Share Reserve Amendment, the ISO Limit Amendment and the Automatic Grant Program Amendment) will become effective as of the date of the Annual Meeting, with the new shares reserved for issuance under the Share Reserve Amendment being reserved effective upon the filing of the Common Increase Certificate with the Secretary of State of the State of Delaware; and
- if Proposal No. 3 is approved by our stockholders, but this Proposal No. 4 is not approved by our stockholders, then the Amended 2018 Plan (including the Automatic Grant Program Amendment, but not the Share Reserve Amendment or the ISO Limit Amendment) will become effective as of the date of the Annual Meeting.

The proposed Common Increase Certificate would increase the number of shares of common stock that we are authorized to issue from 160,000,000 shares of common stock to 320,000,000 shares of common stock, representing an increase of 160,000,000 shares of authorized common stock, with a corresponding increase in the total authorized capital stock, which includes common stock and preferred stock, from 165,000,000 shares to 325,000,000 shares.

Reasons for the Increase in Authorized Shares

We have incurred significant operating losses and negative operating cash flows since our inception and have no current therapeutic product sales. Since our inception, we have funded our operations primarily through the issuance of equity securities and revenues from collaborations and research grants, and we will need to raise substantial additional capital to fund the

development, manufacturing and potential commercialization of our product candidates. We have no credit facility or committed sources of capital other than limited research grants and potential contingent event-based and royalty payments that we are eligible to receive under our various collaborations. Accordingly, until we can generate sufficient product revenues, if ever, we expect to finance future cash needs through public or private equity or equity-linked offerings, debt financings, research grants and/or collaboration and licensing arrangements (which arrangements can also involve the possibility of an equity investment, such as our recently-announced transformative collaboration with Biogen).

As of the date of this proxy statement, the Board has no definitive plans, arrangements or understandings to issue any of the additional shares of common stock that would be available as a result of the approval of the proposed Common Increase Certificate, other than in connection with the proposed increase to the aggregate number of shares of our common stock that may be issued under the Amended 2018 Plan, assuming Proposal No. 3 is approved by our stockholders. Our Board believes it is appropriate to increase our authorized shares of common stock so that we have shares of common stock available to provide additional flexibility to promptly and appropriately use our common stock for business and financial purposes in the future, as well as to have sufficient shares available to provide appropriate equity incentives for our employees and other eligible service providers. The additional shares of common stock, if approved, may be used for various purposes without further stockholder approval. These purposes may include raising capital; providing equity incentives to employees, officers, directors, consultants and/or advisors; establishing collaborative or partnering arrangements with other companies; expanding our business through the acquisition of other businesses, products or technologies; and other purposes.

For example, we will need to raise substantial additional capital to fund the development, manufacturing and potential commercialization of our product candidates. In addition, as we focus our efforts on proprietary human therapeutics, we will need to seek approvals from the U.S. Food and Drug Administration, or FDA, of potential products, a process that could cost in excess of hundreds of millions of dollars per product. Accordingly, we regularly consider fund raising opportunities and may decide, from time to time, to raise capital based on various factors, including market conditions and our plans of operation. In this regard, if the Board determines that raising additional capital through issuing the additional shares of common stock is desirable, we want to be able to act quickly if market conditions are favorable. Given the complete lack of available unissued and unreserved authorized shares of our common stock, if this Proposal No. 4 is not approved, we will not be able to raise future capital without first obtaining stockholder approval for an increase in the number of authorized shares of common stock. The cost, prior notice requirements and delay involved in obtaining stockholder approval at the time that corporate action may be necessary or desirable could completely eliminate our ability to opportunistically capitalize on favorable market windows, which could delay or preclude our ability to advance our development and potential commercialization efforts. In addition, our success depends in part on our continued ability to attract, retain and motivate highly qualified management and clinical personnel, and if the proposed Common Increase Certificate is not approved by our stockholders, the lack of unissued and unreserved authorized shares of common stock to provide future equity incentive opportunities that the Compensation Committee deems appropriate could adversely impact our ability to achieve these goals, and would further frustrate any approval by our stockholders of Proposal No. 3 with respect to the Share Reserve Amendment and the ISO Limit Amendment that are part of Proposal No. 3. In this regard, if this Proposal No. 4 is not approved by our stockholders, then neither the Share Reserve Amendment nor the ISO Limit Amendment will become effective and we will therefore not be able to issue *any* of the new shares of common stock under the Amended 2018 Plan that we are seeking as part of the Share Reserve Amendment. In summary, if our stockholders do not approve this Proposal No. 4, we may not be able to access the capital markets; continue to conduct the research and development and clinical and regulatory activities necessary to bring our product candidates to market; complete future corporate collaborations and partnerships; attract, retain and motivate employees, officers, directors, consultants and/or advisors; and pursue other business opportunities integral to our growth and success, all of which could severely harm our business and our prospects.

The Board believes that the proposed increase in authorized common stock will make sufficient shares available to provide the additional flexibility necessary to pursue our strategic objectives. Over the past several years, our authorized common stock has allowed us the flexibility to pursue a number of financing and collaboration transactions, such as our recently announced transformative collaboration with Biogen, that were key to enabling our support of our development programs while at the same time enabling us to continue to provide the employee equity incentives that we deem necessary to attract and retain key employees. Unless our stockholders approve this Proposal No. 4, we will not have *any* unissued and unreserved authorized shares of common stock to support the growth needed to continue the development of our product candidates by engaging in similar transactions in the future and to respond to compensatory needs by implementing new or revised equity compensation plans or arrangements such as the Amended 2018 Plan, all of which could severely harm our business and our prospects.

Effects of the Increase in Authorized Shares

The additional common stock proposed to be authorized under the Common Increase Certificate would have rights identical to our current outstanding common stock. Stockholder approval of the Common Increase Certificate and issuance of the common stock authorized thereby would not affect the rights of the holders of our currently outstanding common stock, except for effects incidental to increasing the number of shares of common stock outstanding, such as dilution of the earnings per share and voting rights of current holders of common stock. The additional shares of common stock authorized by the proposed Common

Increase Certificate could be issued by the Board without further vote of our stockholders except as may be required in particular cases by the Restated Certificate, applicable law, regulatory agencies or Nasdaq rules. Under the Restated Certificate, our stockholders do not have preemptive rights to subscribe for additional securities that may be issued by us, which means that current stockholders do not have a prior right thereunder to purchase any newly issued shares of common stock in order to maintain their proportionate ownership interests in us.

The increase in our authorized shares of common stock could also have an anti-takeover effect, in that additional shares could be issued (within the limits imposed by applicable law) in one or more transactions that could make a change in control or takeover of Sangamo difficult. For example, additional shares could be issued by us so as to dilute the stock ownership or voting rights of a person seeking to obtain control of Sangamo. Similarly, the issuance of additional shares to certain persons allied with our management could have the effect of making it more difficult to remove our management by diluting the stock ownership or voting rights of persons seeking to cause such removal. Although this proposal to approve the Common Increase Certificate has been prompted by business and financial considerations and not by the threat of any hostile takeover attempt (nor is the Board currently aware of any such attempts directed at us), and the Board does not intend or view the proposed increase in the number of authorized shares of common stock as an anti-takeover measure, stockholders should nevertheless be aware that approval of this Proposal No. 4 could facilitate future efforts by us to deter or prevent changes in control, including transactions in which our stockholders might otherwise receive a premium for their shares over then-current market prices.

Vote Required

The affirmative vote of the holders of a majority of outstanding shares of common stock will be required to approve Proposal No. 4. Abstentions will have the same effect as votes against Proposal No. 4.

RECOMMENDATION OF THE BOARD OF DIRECTORS

The Board recommends that stockholders vote FOR the approval of the Common Increase Certificate.

PROPOSAL NO. 5:

RATIFICATION OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Audit Committee has appointed Ernst & Young LLP, our independent registered public accounting firm during 2019, to serve in the same capacity for the year ending December 31, 2020, and is asking the stockholders to ratify this appointment.

Neither our Bylaws nor other governing documents or law require stockholder ratification of the selection of Ernst & Young LLP as our independent registered public accounting firm. However, the Audit Committee is submitting the selection of Ernst & Young LLP to the stockholders for ratification as a matter of good corporate practice. In the event the stockholders fail to ratify the appointment, the Audit Committee will reconsider its selection. Even if the selection is ratified, the Audit Committee in its discretion may direct the appointment of a different independent registered public accounting firm at any time during the year if the Audit Committee believes that such a change would be in the best interests of Sangamo and its stockholders.

A representative of Ernst & Young LLP is expected to be present at the Annual Meeting and will have the opportunity to make a statement if he or she desires to do so, and will be available to respond to appropriate questions.

Principal Accounting Fees and Services

The following table presents fees for professional audit services rendered by Ernst & Young LLP for the audit of our annual financial statements for 2019 and 2018, and fees billed for other services rendered by Ernst & Young LLP during 2019 and 2018:

	Year Ended December 31,	
	2019	2018
Audit fees and expenses ⁽¹⁾	\$ 1,520,256	\$ 2,205,461
Audit - related fees	—	—
Tax fees ⁽²⁾	26,780	46,350
All other fees	—	—
Total	\$ 1,547,036	\$ 2,251,811

- (1) Includes fees and expenses for the audit of our annual financial statements included in our annual reports on Form 10-K and the related audit of internal control over financial reporting, review of interim financial statements included in our quarterly reports on Form 10-Q, consultations regarding accounting and auditing matters, fees in connection with the filing of our registration statements on Form S-3 and Form S-8 and related amendments and services normally provided in connection with statutory and regulatory filings.
- (2) Consists of fees billed for professional services for tax compliance, tax advice and tax planning.

Policy on Audit Committee Pre-Approval of Audit and Permissible Non-Audit Services

Under its charter, the Audit Committee must pre-approve all engagements of the independent registered public accounting firm for the performance of all audit and non-audit services that are not prohibited and the fees for such services. The Audit Committee has delegated to its Chairman the authority to evaluate and approve service engagements on behalf of the full committee in the event a need arises for specific pre-approval between committee meetings. If the Chairman approves any such engagements, he will report such approval to the full Audit Committee not later than the next committee meeting.

The Audit Committee has determined that the rendering of other professional services for tax compliance and tax advice by Ernst & Young LLP is compatible with maintaining their independence. The Audit Committee has established a policy governing our use of Ernst & Young LLP for non-audit services. Under the policy, management may use Ernst & Young LLP for non-audit services that are permitted under SEC rules and regulations, provided that management obtains the Audit Committee's approval before such services are rendered.

The services provided by Ernst & Young LLP in 2019 were pre-approved in accordance with this policy.

Approval of this Proposal No. 5 requires votes "FOR" from holders of a majority in voting power of the shares present in person or represented by proxy at the Annual Meeting and entitled to vote on this Proposal No. 5.

RECOMMENDATION OF THE BOARD OF DIRECTORS

The Board of Directors recommends that the stockholders vote FOR the ratification of the appointment of Ernst & Young LLP to serve as our independent registered public accounting firm for the year ending December 31, 2020.

EXECUTIVE OFFICERS

The following table sets forth information regarding our executive officers as of March 20, 2020:

Name	Age	Position
Alexander D. Macrae, M.B., Ch.B., Ph.D.	57	President, Chief Executive Officer and Director
Sung H. Lee	49	Executive Vice President and Chief Financial Officer
Stéphane Boissel	52	Executive Vice President, Corporate Strategy
Adrian Woolfson, B.M., B.Ch., Ph.D.	55	Executive Vice President, Research and Development
Gary H. Loeb	50	Executive Vice President, General Counsel and Secretary
R. Andrew Ramelmeier, Ph.D.	58	Executive Vice President, Technical Operations

Alexander D. Macrae. Biographical information regarding Dr. Macrae is set forth under “Proposal No. 1: Election of Directors.”

Sung H. Lee has served as our Executive Vice President and Chief Financial Officer since October 2019. Mr. Lee served in various roles at Gilead Sciences, Inc. since 2005 before joining the Company, most recently as Senior Vice President, Financial Planning & Analysis, or FP&A, and Investor Relations from March 2019 to October 2019. Previously, Mr. Lee served as Vice President of FP&A and Investor Relations from September 2018 to February 2019, Vice President of Investor Relations from June 2016 to August 2018, and Senior Director, Investor Relations from 2013 to May 2016. From 2010 to 2013, Mr. Lee was the Head of Europe FP&A at Gilead and prior to that served as the Head of Research & Development FP&A from 2006-2010. Mr. Lee received a B.A. from University of California, Irvine and an M.B.T. from University of Southern California.

Stéphane Boissel has served as our Executive Vice President of Corporate Strategy since October 2018. From June 2019 through October 2019, Mr. Boissel additionally served as our interim Chief Financial Officer. Prior to joining the Company, since April 2015, Mr. Boissel served as Chief Executive Officer of Sangamo Therapeutics France S.A.S., or Sangamo France (formerly known as TxCell S.A.), which we acquired in October 2018. Prior to Sangamo France, Mr. Boissel served as Chief Executive Officer of Genclis, a molecular diagnostics company from 2014 to April 2015. From 2010 to 2014, Mr. Boissel served as Executive Vice President and Chief Financial Officer of Transgene S.A., and from 2002 to 2010, he served as Chief Financial Officer and then Executive Vice President and Chief Financial Officer of Innate Pharma S.A. Earlier in his career, Mr. Boissel worked in investment banking for Lazard, where he focused on principal investment in France, Singapore and Hong Kong. Mr. Boissel completed his undergraduate work in management and finance at the University of Lyon and Paris-Dauphine in France and received his M.B.A. from the University of Chicago.

Adrian Woolfson, B.M., B.Ch., Ph.D. has served as our Executive Vice President of Research and Development since January 2019. Dr. Woolfson has over a decade of biopharmaceutical industry experience in drug discovery, medical affairs and early and late stage clinical development. Most recently, from January 2018 to November 2018, he served as Chief Medical Officer at Nouscom AG, a genetic cancer vaccine biotechnology company based in Basel, Switzerland, where he led the development of the company’s off-the-shelf and personalized neoantigen vaccine and oncolytic virus strategy. Prior to Nouscom, Dr. Woolfson served as Global Clinical Leader, Early and Late Stage Immuno-Oncology/Hematology at Pfizer, Inc. in New York from January 2015 to January 2018, and was responsible for defining Pfizer’s hematology immune-oncology strategy and building its immune-oncology hematological malignancies portfolio. Prior to that, he was the Global Lead from July 2013 to January 2018 for Pfizer’s smoothed, or SMO, inhibitor glasdegib, which received FDA approval in 2018. From 2007 to 2013, Dr. Woolfson held roles of increasing responsibility at Bristol-Myers Squibb, including Global Medical Lead for a first-in-human CDC7 inhibitor and selective JAK2 inhibitor. Dr. Woolfson completed his post-graduate training in internal medicine at Addenbrooke’s Hospital, Cambridge in the United Kingdom. He holds a B.M. B.Ch. degree in Clinical Medicine from Oxford University and completed his Ph.D. in molecular immunology at Cambridge University. He was the Charles and Katherine Darwin Research Fellow at Darwin College, Cambridge and a Wellcome Trust Clinical Research Fellow. He completed his doctoral and post-doctoral work in the laboratory of Nobel Prize winner and inventor of monoclonal antibodies, Dr. Cesar Milstein in the Division of Protein and Nucleic Acid Chemistry at the MRC Laboratory of Molecular Biology in Cambridge, United Kingdom.

Gary H. Loeb, has served as our Executive Vice President and General Counsel since July 2019 and as our Secretary and Chief Compliance Officer since September 2019. Mr. Loeb is responsible for all legal matters for Sangamo and has over 20 years of experience in biotechnology, legal transactions and operations, and compliance. Prior to joining Sangamo, Mr. Loeb served from November 2016 to June 2019 as General Counsel, Corporate Secretary and Chief Compliance Officer at Achaogen Inc., an anti-infectives company. As a member of the Executive Team, he built Achaogen’s legal and compliance functions and supported its first product launch for plazomicin, which is listed by the World Health Organization as an “essential medicine.” In April 2019, Achaogen filed a voluntary petition for relief under Chapter 11 of the U.S. Bankruptcy Code and most of its assets were subsequently sold to a multinational pharmaceutical company. Prior to joining Achaogen, Mr. Loeb served as General Counsel for Sano Intelligence Inc., a medical device company from November 2015 to June 2016, and as Executive Vice President, Business

Development and General Counsel of Counsyl, Inc., a health technology company, from August 2013 to November 2015. Prior to Counsyl, Mr. Loeb was General Counsel at Amyris, Inc., a publicly-traded synthetic biotechnology company and Vice President of Intellectual Property at Genentech, Inc, where he was had roles of increasing responsibility over eleven years. Mr. Loeb received his B.S. and B.A. degrees from Stanford University and his J.D. from Columbia Law School.

R. Andrew “Andy” Ramelmeier, Ph.D. currently serves as our Executive Vice President, Technical Operations and is responsible for technical operations at Sangamo, including manufacturing, quality, supply chain and process and analytical development. Dr. Ramelmeier has 25 years of experience in the biopharmaceutical industry, developing and transferring biological processes, designing and building manufacturing facilities, and directing contract manufacturers as well as internal manufacturing operations. From 2014 through 2017, Dr. Ramelmeier served as Senior Vice President, Technical Operations at Portola Pharmaceuticals, Inc., where he was responsible for tech transfer, bulk and drug product manufacturing, technical support and supply chain of Portola’s pipeline products. From 2006 to 2014, Dr. Ramelmeier served as Vice President, Manufacturing, Process Sciences and Facilities at BioMarin Pharmaceutical Inc., overseeing multiple commercial biologics products, clinical pipeline, and facilities in Novato, California, and Shanbally, Ireland. Earlier in his career, he held roles of increasing responsibility at Johnson & Johnson and Merck & Co., Inc. Prior to joining industry, Dr. Ramelmeier conducted post-doctoral work in Germany. He received a B.S. in Chemical Engineering from Johns Hopkins and his Ph.D. in Chemical Engineering from the University of California, Berkeley.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information known to Sangamo with respect to the beneficial ownership of our common stock as of March 20, 2020, except as noted, by (i) all persons who were beneficial owners of five percent (5%) or more of our common stock based on 116,211,355 shares outstanding as of March 20, 2020, (ii) each current director and each nominee for director, (iii) the executive officers named in the Summary Compensation Table below, and (iv) all current directors and executive officers as a group. Unless otherwise indicated, the principal address of each of the stockholders below is c/o Sangamo Therapeutics, Inc., 7000 Marina Boulevard, Brisbane, CA 94005. Except as otherwise indicated or to the extent authority may be shared by both spouses under applicable law, and subject to applicable community property laws, we believe the persons named in the table have sole voting and investment power with respect to all shares of common stock held by them.

Name and Address of Beneficial Owner	Number of Shares Beneficially Owned	Percentage of Shares Beneficially Owned
BlackRock, Inc. (1) 55 East 52nd Street New York, NY 10055	9,534,271	8.2 %
Vanguard Group Inc. (2) 100 Vanguard Blvd. Malvern, PA 19355	8,488,504	7.3 %
Wellington Management Group LLP (3) 280 Congress Blvd. Boston, MA 02110	7,840,682	6.7 %
Wasatch Advisors, Inc. (4) 505 Wakara Way Salt Lake City, UT 84108	7,487,017	6.4 %
Alexander D. Macrae (5)	1,221,476	1.0 %
Stéphane Boissel (6)	134,487	*
Robert F. Carey (7)	75,000	*
Stephen G. Dilly, M.B.B.S., Ph.D. (8)	105,000	*
Sung H. Lee	—	*
Gary H. Loeb	—	*
John H. Markels (9)	30,000	*
James R. Meyers (10)	30,000	*
H. Stewart Parker (11)	123,000	*
R. Andrew Ramelmeier (12)	97,670	*
Saira Ramasastry (13)	85,000	*
Karen L. Smith (14)	49,167	*
Adrian Woolfson (15)	96,596	*
Kathy Y. Yi (16)	1,429	*
Joseph S. Zakrzewski (17)	90,000	*
All current directors and executive officers as a group (14 persons) (18)	2,137,396	1.8 %

* Less than one percent.

- (1) This information is based solely on information contained in the Schedule 13G/A filed with the SEC on February 6, 2020 by BlackRock, Inc., or BlackRock. BlackRock, as a parent holding company or control person, may be deemed to beneficially own the indicated shares and has sole dispositive power over 9,534,271 shares and sole voting power over 9,241,105 shares. BlackRock reported its beneficial ownership on behalf of itself and the following: BlackRock Advisors, LLC, BlackRock (Netherlands) B.V., BlackRock Institutional Trust Company, National Association, BlackRock Asset Management Ireland Limited, BlackRock Financial Management, Inc., BlackRock Japan Co., Ltd., BlackRock Asset Management Schweiz AG, BlackRock Investment Management, LLC, BlackRock Investment Management (UK) Limited, BlackRock Asset Management Canada Limited, BlackRock (Luxembourg) S.A., BlackRock Investment Management (Australia) Limited and BlackRock Fund Advisors. The Schedule 13G/A provides information only as of December 31, 2019 and, consequently, the beneficial ownership of the above-mentioned entities may have changed between December 31, 2019 and March 20, 2020.
- (2) This information is based solely on information contained in the Schedule 13G/A filed with the SEC on February 12, 2020 by The Vanguard Group, Inc., or Vanguard. Vanguard may be deemed to beneficially own the indicated shares and has sole dispositive power over 8,282,120 shares, shared dispositive power over 206,384 shares, sole voting power over 203,034 shares and shared voting power over 18,401 shares. Vanguard reported its beneficial ownership on behalf of itself and the following: Vanguard Fiduciary Trust Company and Vanguard Investments Australia, Ltd., each a wholly owned subsidiary of Vanguard. The Schedule 13G/A provides information only as of December 31, 2019 and, consequently, the beneficial ownership of the above-mentioned entities may have changed between December 31, 2019 and March 20, 2020.
- (3) This information is based solely on information contained in the Schedule 13G filed with the SEC on January 28, 2020 by Wellington Management Group LLP, or Wellington. Wellington may be deemed to beneficially own the indicated shares and has shared dispositive power over 7,840,682 shares and shared voting power over 7,550,747 shares. The shares are

owned of record by clients of the Wellington Investment Advisers. Wellington Investment Advisers Holdings LLP controls directly, or indirectly through Wellington Management Global Holdings, Ltd., the Wellington Investment Advisers. Wellington Investment Advisers Holdings LLP is owned by Wellington Group Holdings LLP. Wellington Group Holdings LLP is owned by Wellington. The Schedule 13G provides information only as of December 31, 2019 and, consequently, the beneficial ownership of the above-mentioned entities may have changed between December 31, 2019 and March 20, 2020.

- (4) This information is based solely on information contained in the Schedule 13G filed with the SEC on February 10, 2020 by Wasatch Advisors, Inc. The Schedule 13G provides information only as of December 31, 2019 and, consequently, the beneficial ownership of the above-mentioned entities may have changed between December 31, 2019 and March 20, 2020.
- (5) Includes 1,194,915 shares of common stock subject to options exercisable within 60 days after March 20, 2020.
- (6) Includes 131,038 shares of common stock subject to options exercisable within 60 days after March 20, 2020.
- (7) Includes (i) 70,000 shares of common stock subject to options exercisable within 60 days after March 20, 2020, of which 68,750 shares fully vest within 60 days of March 20, 2020, and the remaining 1,250 shares are currently exercisable but do not vest within 60 days of March 20, 2020 and would be subject to repurchase upon cessation of service to the Board if exercised prior to vesting and (ii) RSUs covering 2,500 shares of common stock that vest and become issuable within 60 days of March 20, 2020.
- (8) Includes (i) 100,000 shares of common stock subject to options exercisable within 60 days after March 20, 2020, of which 98,750 shares fully vest within 60 days of March 20, 2020, and the remaining 1,250 shares are currently exercisable but do not vest within 60 days of March 20, 2020 and would be subject to repurchase upon cessation of service to the Board if exercised prior to vesting and (ii) RSUs covering 2,500 shares of common stock that vest and become issuable within 60 days of March 20, 2020.
- (9) Consists of 30,000 shares of common stock issuable upon the exercise of stock options within 60 days of March 20, 2020, of which 2,500 shares fully vest within 60 days of March 20, 2020, and the remaining 27,500 shares are currently exercisable but do not vest within 60 days of March 20, 2020 and would be subject to repurchase upon cessation of service to the Board if exercised prior to vesting.
- (10) Consists of 30,000 shares of common stock issuable upon the exercise of stock options within 60 days of March 20, 2020, of which 4,166 shares fully vest within 60 days of March 20, 2020, and the remaining 25,834 shares are currently exercisable but do not vest within 60 days of March 20, 2020 and would be subject to repurchase upon cessation of service to the Board if exercised prior to vesting.
- (11) Includes (i) 110,000 shares of common stock issuable upon the exercise of stock options within 60 days of March 20, 2020, of which 108,750 shares fully vest within 60 days of March 20, 2020, and the remaining 1,250 shares are currently exercisable but do not vest within 60 days of March 20, 2020 and would be subject to repurchase upon cessation of service to the Board if exercised prior to vesting and (ii) RSUs covering 2,500 shares of common stock that vest and become issuable within 60 days of March 20, 2020.
- (12) Includes 91,875 shares of common stock issuable upon the exercise of stock options within 60 days of March 20, 2020.
- (13) Includes (i) 80,000 shares of common stock issuable upon the exercise of stock options within 60 days of March 20, 2020, of which 78,750 shares fully vest within 60 days of March 20, 2020, and the remaining 1,250 shares are currently exercisable but do not vest within 60 days of March 20, 2020 and would be subject to repurchase upon cessation of service to the Board if exercised prior to vesting and (ii) 2,500 RSUs covering shares of common stock that vest and become issuable within 60 days of March 20, 2020.
- (14) Consists of (i) 45,000 shares of common stock issuable upon the exercise of stock options within 60 days of March 20, 2020, of which 32,083 shares fully vest within 60 days of March 20, 2020, and the remaining 12,917 shares are currently exercisable but do not vest within 60 days of March 20, 2020 and would be subject to repurchase upon cessation of service to the Board if exercised prior to vesting and (ii) RSUs covering 2,500 shares of common stock that vest and become issuable within 60 days of March 20, 2020.
- (15) Includes (i) 72,916 shares of common stock subject to options exercisable within 60 days after March 20, 2020 and (ii) 5,001 shares of common stock held in an individual retirement account for the benefit of Dr. Woolfson.
- (16) Ms. Yi resigned from her position as Executive Vice President and Chief Financial Officer effective June 7, 2019.
- (17) Includes (i) 60,000 shares of common stock issuable upon the exercise of stock options within 60 days of March 20, 2020, of which 57,083 shares fully vest within 60 days of March 20, 2020, and the remaining 2,917 shares are currently exercisable but do not vest within 60 days of March 20, 2020 and would be subject to repurchase upon cessation of service to the Board if exercised prior to vesting and (ii) RSUs covering 2,500 shares of common stock that vest and become issuable within 60 days of March 20, 2020.
- (18) The percentages are calculated based on 116,211,355 shares outstanding as of March 20, 2020. Shares of common stock issuable upon the exercise of options currently exercisable or exercisable within 60 days after March 20, 2020, are deemed outstanding for purposes of computing the percentage ownership of the person holding such options, but are not deemed outstanding for computing the percentage ownership of any other person. Because Ms. Yi resigned effective as of June 7, 2019, the number of shares and percentage ownership indicated in the table above with respect to the beneficial ownership of all directors and executive officers as a group do not include any shares beneficially owned by Ms. Yi.

DELINQUENT SECTION 16(a) REPORTS

The members of the Board of Directors, our executive officers and persons who beneficially own more than 10% of our outstanding common stock are subject to the reporting requirements of Section 16 of the Exchange Act, as amended, which require them to file reports with respect to their beneficial ownership of the common stock and their transactions in such common stock. Based upon (i) a review of Forms 3 and 4 and any amendments thereto filed electronically with the SEC during 2019, (ii) a review of Forms 5 and any amendments thereto filed electronically with the SEC with respect to 2019, and (iii) written representations that no Form 5 reports were required, we believe that all reporting requirements under Section 16 for such year were met in a timely manner by our directors, executive officers and greater than 10% beneficial owners, except for the following: one Form 4 report was filed late in 2019 disclosing two transactions in 2018 by Mr. Boissel, one Form 4 report was filed late disclosing one transaction by Mr. Loeb, and a Form 3 report filed by Dr. Woolfson inadvertently omitted indirect holdings of our common stock, which error was corrected by amending the original Form 3 report.

EXECUTIVE COMPENSATION

Compensation Discussion and Analysis

It is our intent in this CD&A to inform our stockholders of the policies and objectives underlying the compensation programs for our executive officers. Accordingly, we will address and analyze the key elements of the compensation provided to our principal executive officer, each person who served as our principal financial officer during 2019 and our three other most highly compensated executive officers as of December 31, 2019. We refer to these officers as our “named executive officers.”

Alexander D. Macrae	President and Chief Executive Officer
Sung H. Lee	Executive Vice President and Chief Financial Officer
Stéphane Boissel	Executive Vice President, Corporate Strategy and former Interim Chief Financial Officer
Adrian Woolfson	Executive Vice President, Research and Development
Gary H. Loeb	Executive Vice President, General Counsel and Secretary
R. Andrew Ramelmeier	Executive Vice President, Technical Operations
Kathy Y. Yi	Former Executive Vice President and Chief Financial Officer

Executive Summary

Our Business

We are a clinical stage biotechnology company focused on translating ground-breaking science into genomic medicines with the potential to transform patients’ lives using our platform technologies in gene therapy, *ex vivo* gene-edited cell therapy, *in vivo* genome editing and *in vivo* genome regulation. In our proprietary clinical development programs, we are focused on several therapeutic areas, including inherited metabolic diseases, or IMDs, certain diseases of the central nervous system, or CNS, and immunological/autoimmune diseases.

We are a leader in the research and development of zinc finger proteins, or ZFPs, a naturally occurring class of transcription factor proteins found in humans and other species. We have used our internal know-how and technical expertise to develop a proprietary synthetic ZFP platform with potential clinical utility in *ex vivo* gene-edited cell therapy, *in vivo* genome editing and *in vivo* genome regulation. ZFPs can be engineered to make zinc finger nucleases, or ZFNs, proteins that can be used to specifically modify DNA sequences by knocking in or knocking out select genes, or genome editing, and ZFP transcription factors, or ZFP-TFs, proteins that can be used to selectively increase or decrease gene expression. In the process of developing this platform, we have additionally accrued significant scientific, manufacturing, development capabilities, and related know-how that are broadly applicable to the field of gene therapy and have used this knowledge to advance a gene therapy platform.

Our Business Strategy

Our strategy is to maximize the value and therapeutic use of our technology platforms. For certain therapies, we intend to capture the value of our proprietary gene therapy and genome editing products by incorporating these technologies into our manufacturing, development and commercial operations. For other therapies, we intend to partner with biopharmaceutical companies to develop products as appropriate. Decisions to partner product candidates will be based on review of our internal resources, internal know-how, and commercial considerations.

2019 and Early 2020 Performance Highlights

2019 Highlights

In late December 2019, we completed the transfer to Pfizer, Inc., or Pfizer, of the SB-525 hemophilia A gene therapy investigational new drug, or IND, application for which we earned a \$25.0 million milestone payment under the terms of our

collaboration agreement with Pfizer for the global development and commercialization of gene therapies for hemophilia A. In 2019, we also completed the manufacturing technology transfer to Pfizer. Pfizer is now in the process of advancing SB-525 into a Phase 3 registrational clinical study. We presented updated follow-up of the Phase 1/2 Alta Study assessing SB-525 in adult patients with severe hemophilia A in partnership with Pfizer at the 61st American Society of Hematology, or ASH, annual meeting in December 2019. The data showed that SB-525 was generally well-tolerated and demonstrated sustained increased Factor VIII levels following treatment with SB-525 through to 44 weeks, the extent of follow-up for the longest treated patient in the 3e13 vg/kg dose cohort.

We presented preliminary data from the Phase 1/2 THALES Study assessing ST-400, investigational *ex vivo* gene-edited cell therapy in patients with transfusion-dependent beta thalassemia in partnership with Bioverativ Inc., (now Sanofi Genzyme, a global business unit of Sanofi, or Sanofi) at the ASH annual meeting in December 2019. In December 2019, we also achieved a \$7.5 million milestone from Sanofi for the first patient dosed in its Phase 1/2 PRECIZN-1 trial evaluating BIVV003, investigational *ex vivo* gene-edited cell therapy for the treatment of sickle cell disease, or SCD.

In November 2019, we established a new Scientific Advisory Board comprising industry and academic international thought leaders who will advise us on our current and future clinical programs and research and development strategy.

Throughout 2019, we focused on hiring personnel and building out facilities and infrastructure to support, among other corporate operations, (1) manufacturing, (2) our global development footprint, (3) our research and development activities in conjunction with collaborations, and (4) the integration of our activities on a global level.

In late 2019, we received a clinical trial authorization, or CTA, in the United Kingdom for the Phase 1/2 STEADFAST clinical study evaluating the CAR-Treg cell therapy TX200 for kidney transplantation, which we expect to initiate in 2020.

Six U.S. sites are currently active for the Phase 1/2 STAAR study an open-label, dose-ascending clinical trial evaluating ST-920 gene therapy for the treatment of Fabry disease. In 2019, the IND was accepted by the FDA and a CTA was granted in the United Kingdom. The FDA also granted Orphan Drug Designation to ST-920 for the treatment of Fabry disease.

In February 2019, we announced preliminary molecular and enzymatic evidence of editing of the human genome *in vivo*, as part of our interim results from the clinical trials evaluating SB-318 and SB-913. In April 2019, we announced that we did not plan to treat additional patients in our SB-913, SB-318 and SB-FIX clinical trials with first generation ZFNs given that clinical benefit has not been demonstrated in the analyses conducted to date. We are planning a new clinical trial for SB-913 to treat Mucopolysaccharidosis type II, or MPS II, to evaluate next-generation ZFNs and other potential modifications that have the potential to enhance the efficiency of *in vivo* delivery of the ZFNs and the clinical efficacy of this product. We expect to use data from the new study evaluating novel generation ZFNs to make a Phase 3 decision for the SB-913 program and to define the next steps, if any, for the SB-318 and SB-FIX programs.

2020 Highlights

In February 2020, we entered into a global licensing collaboration agreement with Biogen for the research, development and commercialization of gene regulation therapies for the treatment of neurological diseases, including ST-501 a preclinical ZFP-TF product candidate for tauopathies including Alzheimer's disease, and ST-502, a preclinical ZFP-TF product candidate for alpha-synuclein related diseases including Parkinson's disease, among other targets. After the collaboration agreement becomes effective, Biogen will pay us an upfront payment of \$125.0 million. Concurrently with the execution of the collaboration agreement, we also entered into a stock purchase agreement with Biogen MA, Inc. pursuant to which Biogen MA, Inc. agreed to acquire \$225.0 million of shares of our common stock. We are also eligible to receive research, development, regulatory and commercial milestone payments that could total up to approximately \$2.37 billion if Biogen selects all of the targets allowed under the agreement and all the specified milestones set forth in the agreement are achieved, which includes up to \$925.0 million in pre-approval milestone payments and up to \$1,445.0 million in first commercial sale and other sales-based milestone payments. The consummation of the transactions under each of the Biogen collaboration agreement and the stock purchase agreement is subject to the satisfaction of customary closing conditions, including the expiration or termination of the applicable waiting period under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended.

Alignment of Executive Compensation Program with Business Strategy

Pharmaceutical research, development and commercialization require sustained and focused effort over many years, and involves a high degree of risk. As a consequence, the Compensation Committee believes our compensation program must balance long-term incentives that reward for the realization of our long-term strategic objectives with near-term compensation that rewards for the achievement of annual goals that further the attainment of our long-term objectives and align the interests of our executives with those of our stockholders.

The Compensation Committee generally believes that a formulaic or purely quantitative approach to executive compensation is not the best way to foster long-term success for us as a clinical-stage biotechnology company that is not yet profitable. Instead, the Compensation Committee sets annual performance objectives on which it believes our executive officers

should focus during the year in order to achieve our business goals, including, for 2019, aggressive pre-established clinical, R&D, business and corporate development objectives.

The Compensation Committee strives to create a positive relationship between its compensation program and our corporate performance and considers competitive market dynamics, the business environment in which the results were achieved and any unplanned positive or negative events when making compensation decisions. A significant portion of the total compensation opportunity for each of our named executive officers is directly related to our stock price and to other performance factors that measure our progress against our strategic objectives.

In order to assure that the compensation programs for our named executive officers remain competitive with peer companies, accomplish our pay-for-performance objectives, and create rewards for the realization of our long-term strategic objectives, the Compensation Committee works with Radford to obtain the advice and market data needed to ensure that the compensation programs achieve these goals.

Key Features of Our Executive Compensation Program

What We Do

- ü Design executive compensation to align pay with performance
- ü Emphasize performance-based compensation, with 100% of CEO's cash incentive compensation based on pre-established corporate performance goals
- ü Include a "double-trigger" change-in-control provision in all equity awards granted to our named executive officers
- ü Cap the cash incentive compensation plan payouts
- ü Subject our program to independent review by the Compensation Committee's independent compensation consultant

What We Don't Do

- X Provide tax gross-ups
- X Allow repricing of stock options without stockholder approval
- X Offer significant perquisites or personal benefits to our named executive officers
- X Allow hedging or pledging of our securities by employees
- X Offer a defined benefit pension plan, deferred compensation plan or supplemental executive retirement plan

How We Determine Executive Compensation

Role of the Compensation Committee and Executive Officers

The Compensation Committee assists the Board of Directors in fulfilling its fiduciary responsibilities with respect to the oversight of our affairs in the areas of our compensation plans, policies and programs, especially those regarding executive compensation and employee benefits.

The Compensation Committee's responsibilities include, among other things: (i) periodically reviewing and approving a philosophy for the compensation of our executive officers and key employees; (ii) adopting, amending, terminating and administering the Company's compensation plans and programs for our executive officers and key employees, including, among others, equity plans, incentive plans, bonus plans, stock purchase plans, severance plans, pension and profit sharing plans and retirement plans; (iii) reviewing, considering and approving compensation programs applicable to non-employee members of the Board of Directors; (iv) establishing general compensation levels for executive officers (other than the CEO) and key employees; (v) reviewing and evaluating the performance and leadership of the CEO and determining the CEO's total compensation package; (vi) reviewing with the CEO his evaluation of the performance of the executive officers (other than the CEO) and key employees to approve their total compensation package; (vii) reviewing and monitoring management development plans and activities; (viii) reviewing with our Board our succession plan for the CEO and other executive officers; and (ix) conducting risk assessment with respect to our compensation programs. The Compensation Committee does not delegate any of its functions to others in determining executive compensation.

In making executive compensation determinations, the Compensation Committee considers recommendations from Dr. Macrae. In making his recommendations, Dr. Macrae receives input from our human resources department and from the individuals who manage the other executive officers. While Dr. Macrae discusses his recommendations for the other executive officers with the Compensation Committee, he does not participate in the deliberations or determination of his own compensation. Members of our finance, human resources and legal departments may attend Compensation Committee meetings from time to time.

Objectives of Our Compensation Program

We are focused on translating groundbreaking science into genomic medicines with the potential to transform people's lives using our platform technologies in genome editing, gene therapy, gene regulation and cell therapy. To achieve this strategic

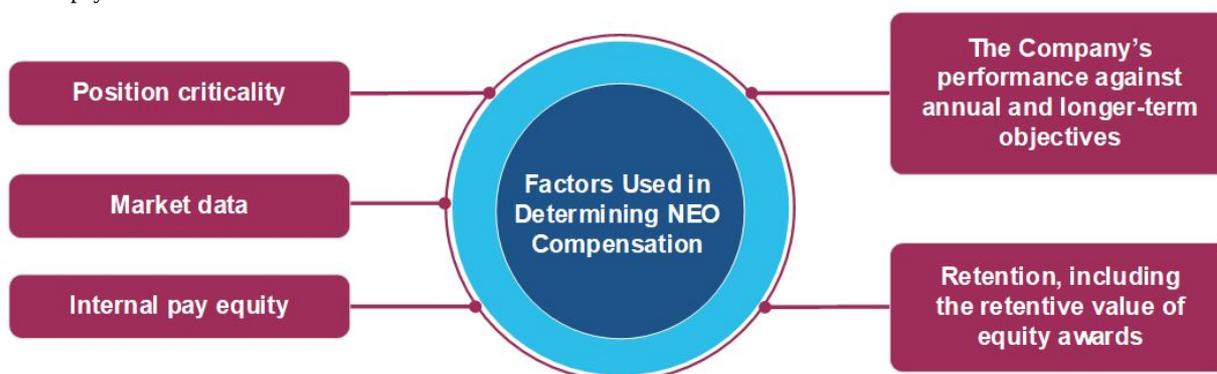
business objective, we emphasize recruiting executives with significant industry or scientific experience, including in the areas of clinical development, medical affairs, product development, commercial planning and research innovation. This is a highly competitive industry and our success depends upon our ability to attract and retain qualified executives through competitive compensation packages. The Compensation Committee administers the compensation programs for our executive officers with this competitive environment and need to attract and retain qualified executives in mind.

To this end, the primary objectives of our compensation program are to:



Factors Used in Determining Executive Compensation

The Compensation Committee sets the compensation of our executive officers at levels that the Compensation Committee determines to be competitive and appropriate for each named executive officer, using the Compensation Committee’s professional experience and judgment. The Compensation Committee does not use a formulaic approach to setting executive pay, but rather it considers multiple relevant factors, which may vary from year to year. The figure below reflects the factors the Compensation Committee generally considers in determining and approving the amount, form and mix of pay for our named executive officers.



Role of Independent Compensation Consultant

The Compensation Committee retained the services of Radford in order to (i) review the peer group selection criteria and specific peer companies, (ii) assess compensation levels and mix of elements for our executive officers and vice presidents for 2019, (iii) advise the Compensation Committee on executive compensation and governance trends based on peer group trends and market practices (including severance arrangements), and (iv) advise the Compensation Committee on compensation programs applicable to our non-employee directors. In late 2018 and 2019, Radford also provided comparative data in connection with setting the compensation for Dr. Woolfson and Messrs. Lee and Loeb when each individual joined us. The Compensation Committee determined that Radford was independent using criteria established by Nasdaq for evaluating the independence of advisors to the Compensation Committee.

Comparative Analysis

For purposes of measuring the competitive positioning of our compensation packages, peer companies are generally selected by the Compensation Committee primarily using the following criteria: (i) companies that fall within a specific market capitalization range of approximately one-third to three times our market capitalization at the time of the peer evaluation (\$500 million to \$5.0 billion at the time we selected our 2019 peer group); (ii) biopharmaceutical companies in the pre-commercial Phase 2 or Phase 3 stage of development; and (iii) companies with 50 to 500 employees. In addition, we prefer companies that are

headquartered in core biotechnology hubs, particularly within the San Francisco Bay Area and other California markets, where we both recruit and may lose executive talent. Because the biotechnology industry is a dynamic industry, the comparator group used by the Compensation Committee to measure the competitive positioning of our compensation packages is periodically updated to ensure that companies continue to meet the established criteria. At the time the peer group was established, our market capitalization was comparable to the 49th percentile of the peers, validating the reasonableness of the peer group.

The selected comparable companies for purposes of making compensation decisions for 2019, or the 2019 peer group, were as follows:

Accelaron Pharma	Fate Therapeutics
Aimmune Therapeutics	Global Blood Therapeutics
Arena Pharmaceuticals	ImmunoGen
Arrowhead Pharmaceuticals	Intellia Therapeutics
Atara Biotherapeutics	Iovance Biotherapeutics
Audentes Therapeutics	MacroGenics
bluebird bio	Mirati Therapeutics
ChemoCentryx	REGENXBIO
CRISPR Therapeutics	Revance Therapeutics
Cytokinetics	Rigel Pharmaceuticals
Denali Therapeutics	Spark Therapeutics
Dynavax Technologies	Ultragenyx Pharmaceutical
Editas Medicine	

Use of Comparative Data

When setting pay, the Compensation Committee examines the market data derived by Radford from the peer group that ranges from the 25th to the 75th percentiles. We do not have a set formula or benchmark for pay. Instead, the Compensation Committee references the market data as one input before making position-specific compensation decisions. We generally seek to manage compensation within the peer group range, if warranted by performance and other factors the Compensation Committee considers relevant in making specific pay decisions. A specific executive officer may be paid below or above the target range based on individual performance, experience, skills and the importance of the executive's position to us. The Compensation Committee considers this approach to determining pay appropriate given that we are based in the San Francisco Bay Area where there is a high concentration of talent competitors creating competitive pressure that requires us to ensure that our overall compensation program is competitive to attract and retain strong leadership for our long-term success based on performance.

2019 Advisory Vote on Executive Compensation

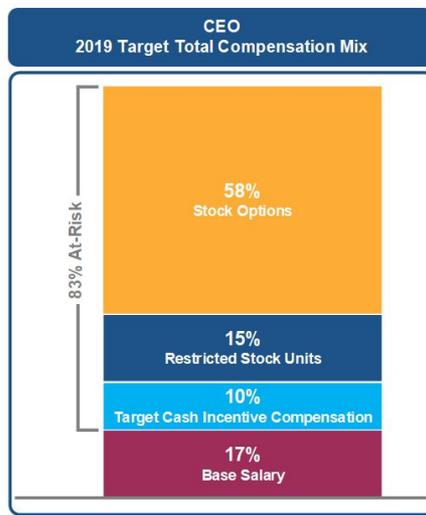
At the 2019 annual meeting of stockholders, we conducted our fourth advisory vote on executive compensation. At such meeting, approximately 91% of the votes cast on the advisory vote proposal were supportive of our named executive officer compensation program as disclosed in our proxy statement.

The Compensation Committee reviewed the advisory vote results in the context of our overall compensation philosophy and programs, and based on the level of support, determined that no significant changes to our compensation policies and programs were necessary. The Compensation Committee will continue to consider the results from future stockholder advisory votes on executive compensation and other relevant market developments affecting executive officer compensation in order to determine whether any subsequent changes to our executive compensation programs and policies would be warranted to reflect any stockholder concerns reflected in those advisory votes or to address market developments.

Design of the Executive Compensation Program and Key Components

Target Total Compensation

As discussed above, the development and commercialization of pharmaceutical products involve a high degree of risk. The Compensation Committee regularly evaluates the relative importance of equity and cash components of total compensation when determining the level and structure of annual pay based on the business priorities established by the Board of Directors. Target total compensation for 2019, as shown below for Dr. Macrae, reflects annual base salary, annual target cash incentive compensation and the grant date fair value of stock options granted during the year (as such stock options are reported in the Summary Compensation Table).



Key Elements of Our Executive Compensation Program

Component	Key Features	Purpose
Base Salary	<ul style="list-style-type: none"> •Fixed cash compensation •Annual increases are not guaranteed •Amounts are reviewed and determined annually (or at the time of a change in the executive’s title or position during the year) •Amounts determined based on individual performance, experience, skills and the importance of the executive’s position 	<ul style="list-style-type: none"> •Enables us to attract and retain skilled and experienced executives and to provide a level of economic security for executives from year to year •Provides fixed level of compensation that is competitive within our industry and geographic area
Cash Incentive Compensation	<ul style="list-style-type: none"> •Cash compensation under the Sangamo Therapeutics, Inc. Amended and Restated Incentive Compensation Plan, or the Incentive Plan, which is dependent upon achievement of performance objectives •Target amounts are reviewed and determined annually (or at the time of a change in the executive’s title or position during the year) and expressed as a percentage of base salary •Actual amounts paid are based on the extent corporate objectives are attained as determined by the Compensation Committee, and for executive officers other than Dr. Macrae, on the achievement of pre-established individual goals that align with our overall priorities 	<ul style="list-style-type: none"> •Provides executive officers with a direct financial incentive in the form of cash incentive compensation tied to our achievement of aggressive pre-established clinical, research and development, business and corporate development goals for the year based on our annual operating plan •Aligns pay structure and mix with, and ensures that our total cash compensation is within, competitive norms within the peer group and more broadly in the sector •Aligns a portion of the executive’s cash compensation to specific pre-established goal achievement to reinforce our performance-based culture

Component	Key Features	Purpose
Equity Compensation	<ul style="list-style-type: none"> •Generally in the form of stock options and/or RSUs which are “at-risk” because the realized value is dependent upon our stock price •The exercise price for stock options is equal to the closing price of our stock on the option grant date •Each RSU provides the recipient with one share of our common stock at a designated issue date following the vesting of that unit, without the payment of an exercise price or other cash consideration for the issued share •Executives are eligible for equity awards in connection with annual performance reviews and at time of hire 	<ul style="list-style-type: none"> •Provides long-term incentives that align the interests of our work force with the achievement of our long-term vision to develop and commercialize pharmaceutical products which occurs over time •Given the time periods involved in pharmaceutical development, we believe that long-term incentives are critical to our success to provide long-term focus, aid in retention and mitigate short-term risk taking to realize gains in the near term that creates risk in the long-term •We believe that a mix of stock options and RSUs reinforces the long-term nature of our business and alignment with our stockholders by rewarding for improvements in stock price over a period of time. The Company issues stock options to reward for future performance and appreciation while providing RSUs to manage the natural market volatilities for a development stage company, provide retention incentives during the vesting period and to reinforce a culture of ownership. •By granting RSUs the Company can also reduce the dilutive effect of the equity incentive awards which benefits our stockholders over time

2019 Compensation Decisions

2019 Base Salary

In general, the base salaries of our named executive officers for 2019 were between the 50th and 75th percentiles of the market data derived from the peer group.

In December 2018, we conducted annual performance reviews for 2018 for the named executive officers. In early 2019, the Compensation Committee considered these reviews, our 2018 performance, advice from Radford and competitive data from the peer group and determined to increase base salaries as set forth below. The Compensation Committee specifically considered Dr. Macrae’s responsibility for the Company’s achievement of its corporate objectives; Mr. Boissel’s leadership of transformative transactions; Dr. Ramelmeier’s increased responsibilities in connection with his promotion to Executive Vice President, Technical Operations; and Ms. Yi’s role as a business partner which extended beyond her function, her leadership of a high performing team and her leadership of transformative transactions.

Name	2019 Base Salary (\$)	2018 Base Salary (\$)	Percent Increase
Alexander D. Macrae	661,939	636,480	4%
Sung H. Lee (1)	435,000	—	N/A
Stéphane Boissel	483,600	480,000	1%
Adrian Woolfson (2)	475,000	—	N/A
Gary H. Loeb (3)	400,000	—	N/A
R. Andrew Ramelmeier (4)	400,000	—	N/A
Kathy Y. Yi (5)	421,026	404,833	4%

(1) Mr. Lee commenced employment with the Company on October 31, 2019.

(2) Dr. Woolfson commenced employment with the Company on January 21, 2019.

(3) Mr. Loeb commenced employment with the Company on July 30, 2019.

- (4) Effective as of September 16, 2019, Dr. Ramelmeier's 2019 base salary increased from \$375,950 to \$400,000 in connection with his promotion to Executive Vice President, Technical Operations. Dr. Ramelmeier commenced employment with the Company on January 1, 2018 and became an executive officer when he was promoted to Executive Vice President, Technical Operations, in September 2019.
- (5) Ms. Yi resigned from the Company effective June 7, 2019.

In connection with the commencement of their respective employment with the Company, after taking into consideration each executive officer's compensation at his prior employer, competitive positioning based on the market data derived by Radford from the peer group that ranges from the 25th to the 75th percentiles and internal positioning relative to the Company's other executive officers, the Compensation Committee determined that Messrs. Lee and Loeb and Dr. Woolfson's annual base salary would be \$435,000, \$400,000, and \$475,000, respectively.

2019 Cash Incentive Compensation

In February 2019, we adopted a 2019 Cash Incentive Compensation Program under the Incentive Plan that provides for annual cash incentive compensation to reward executive officers based on our achievement of specific corporate goals and their achievement of individual performance goals. The objectives and weightings that were approved by the Board of Directors in February 2019 under the 2019 Cash Incentive Compensation Program are described in the chart below.



For 2019, the target cash incentive compensation for Dr. Macrae was 60% of base salary and for each of our other named executive officers (other than Ms. Yi, who did not receive any cash incentive compensation under the 2019 Cash Incentive Compensation Program given that her employment with us ended in June 2019), it was 40% of base salary. Dr. Macrae's cash incentive compensation opportunity was based solely on corporate performance and each of our other named executive officers' cash incentive compensation opportunity was allocated between corporate and individual performance (90% and 10%, respectively).

In December 2019, the Compensation Committee determined that our 2019 corporate objectives were attained at 110%, as further described below.

Objective	Weighting	Achievements	Achievement Percentage
Support financial position consistent with corporate strategy	15%	<p>Ended 2019 with \$385.0 million of cash, cash equivalents, marketable securities and interest receivable</p> <p>Monitored and maintained operational expenses</p> <p>Earned revenues of \$102.4 million in 2019, which included a \$25.0 million milestone achievement upon completion of the transfer of the IND for SB-525 to Pfizer, \$7.5 million pertaining to a milestone achievement with Sanofi upon dosing of the first subject in the Phase 1/2 PRECIZN-1 trial evaluating BIVV003, and a \$6.0 million milestone achievement with Sanofi upon dosing of the third subject in the Phase 1/2 THALES study evaluating ST-400</p>	15%
Achieve operational efficiency to support our programs and ensure sufficient resources to prepare for pivotal trials	10%	<p>In-licensed specific technologies designed to improve process development, optimize assays, enhance our intellectual property position, and maintain competitiveness</p> <p>Built infrastructure to support deliverables in key therapeutic areas</p> <p>Attracted talented staff across the company in line with values and culture</p> <p>Executed on strategic enhancements in the areas of lead development process (i.e., speed and throughput)</p>	10%
Advance lead assets and pipeline development programs for IMD and hematology	15%	<p>SB-913 MPS II Phase 1/2 data presented at major conference, Last-Patient-In Phase 1/2 adult expansion</p> <p>SB-318 MPS I Phase 1/2 data presented at major conference</p> <p>Preparations completed for first patient enrollment in Phase 1/2 STAAR study evaluating ST-920 for Fabry disease (with first patient enrollment expected in 2020)</p>	10%
Advance cell therapy pipeline	15%	<p>Completed integration of Sangamo France (formerly TxCell S.A.)</p> <p>Received CTA in the United Kingdom for the Phase 1/2 STEADFAST clinical study evaluating TX200, which we expect to initiate in 2020</p> <p>Identified two new early-stage targets in autoimmune disease</p> <p>Delivered proof of concept on at least two gene editing concepts in regulatory T-cells</p>	10%
Advance partnered programs in line with contractual terms	15%	<p>Completed patient enrollment in the Phase 1/2 Alta study evaluating SB-525 with Pfizer (Phase 1/2 expansion)</p> <p>Completed the transfer to Pfizer of the SB-525 IND, triggering a \$25 million milestone payment from Pfizer</p> <p>Advanced patient enrollment in the Phase 1/2 THALES study evaluating ST-400; dosed third patient in the THALES study, triggering a \$6.0 million milestone from Sanofi and also received \$2.1 million from the California Institute for Regenerative Medicine</p> <p>Completed company deliverables to support Chemistry, Manufacturing and Controls (CMC) activities for BIVV003 at Sanofi</p> <p>Dosed first patient in the Phase 1/2 PRECIZN-1 study evaluating BIVV003, triggering a \$7.5 million milestone from Sanofi</p>	<p>25%</p> <p>(achievement percentage increased due to progress in Biogen collaboration and other partnership accomplishments and development)</p>

Objective	Weighting	Achievements	Achievement Percentage
Build an early, sustainable pipeline for the CNS therapeutic area	10%	Progressed specific CNS target to pre-IND stage Identified and researched proprietary novel CNS delivery vector Initiated work on at least two new CNS indications and investigated proof of mechanism	20% (achievement percentage increased due to success in building proprietary pipeline in addition to significant CNS collaboration)
Remain at the leading edge of gene editing and delivery technologies and explore innovative approaches in genomic medicine	10%	Obtained improved development outcomes for precision and efficiency of delivery and gene modification/regulation Maintained scientific leadership by meeting high-impact publication targets and speaking at key conferences	10%
Build Sangamo culture and support employees based on our core values	10%	Maintained regular employee opportunities to engage with each other and potential patients Measured semi-annual cultural health check survey of all employees	10%

In addition, in January 2020, the Compensation Committee approved individual achievement percentages for our named executive officers (other than Dr. Macrae, whose cash incentive compensation opportunity was tied solely to achievement of the 2019 corporate objectives) based on Dr. Macrae's assessment of and recommendations regarding each executive's accomplishments against pre-established individual objectives, as further described below. As described above, Dr. Macrae does not have individual goals separate from our corporate objectives. For our other named executive officers, the total cash incentive compensation payout for 2019 was based on a weighting of 90% corporate and 10% individual goals. Dr. Macrae recommends individual goals for each other named executive officer, which are aligned with our business strategy and linked with corporate goals, and our Compensation Committee approves these goals. The 2019 individual goals for the named executive officers include those listed below. These specific goals were in addition to the general responsibilities each officer had for managing his or her respective functional operational area. Based on the recommendation of Dr. Macrae, as well as the observations by Compensation Committee members of these executive officers and its own assessment of each individual's effectiveness, the Compensation Committee determined the level of achievement of each named executive officer's individual performance goals as follows:

- Mr. Lee — The Compensation Committee determined that Mr. Lee achieved 100% of his individual objectives. Mr. Lee's key accomplishments in 2019 included: providing leadership to the Company's finance, facilities, and information technology teams during the fourth quarter of 2019; leading the process for establishing the Company's budget for 2020, from departmental operations through the Board of Directors' approval; and initiating strategic planning exercises.
- Mr. Boissel — The Compensation Committee determined that Mr. Boissel achieved 110% of his individual objectives. Mr. Boissel's key accomplishments in 2019 included: providing effective leadership to the Company's finance, facilities, legal, and information technology teams during the transition of a both a new Chief Financial Officer and a new General Counsel; providing strong leadership to team and partners in deal processes, including the Company's collaboration with Biogen; and effectively managing ambiguity and opportunity to build a pipeline of new collaborations.
- Dr. Woolfson — The Compensation Committee determined that Dr. Woolfson achieved 100% of his individual objectives. Dr. Woolfson's key accomplishments in 2019 included: assembling and leading the Scientific Advisory Board; promoting and negotiating new academic collaborations; and focusing on innovation in leveraging our technology in new applications.
- Mr. Loeb — The Compensation Committee determined that Mr. Loeb achieved 100% of his individual objectives. Mr. Loeb's key accomplishments in 2019 included: successfully building out a high-performing legal department; overseeing the Company's corporate governance practices and policies; supporting the Board of Directors and all of its committees; participating in and supporting licensing and collaboration transactions; and updating internal legal systems and infrastructure.
- Dr. Ramelmeier — The Compensation Committee determined that Dr. Ramelmeier achieved 110% of his individual objectives. Dr. Ramelmeier's key accomplishments in 2019 included: leading the successful completion and articulation

of the manufacturing roadmap; overseeing the Company's successful integration of manufacturing and R&D priorities and programs; and achieving significant progress in building out and leading the new manufacturing team and facilities.

The table below sets forth the target and actual cash incentive compensation for our named executive officers:

Name	Target Amount (\$)	Actual Amount (\$)	% of Target
Alexander D. Macrae	397,163	436,880	110%
Sung H. Lee (1)	43,500	47,415	109%
Stéphane Boissel	193,440	212,784	110%
Adrian Woolfson (2)	190,000	207,100	109%
Gary H. Loeb (3)	80,000	87,200	109%
R. Andrew Ramelmeier (4)	139,644	153,608	110%
Kathy Y. Yi (5)	168,410	—	—%

- (1) Mr. Lee's target and actual cash incentive compensation amounts were prorated to reflect that he commenced employment with us in October 2019.
- (2) Dr. Woolfson commenced employment with us in January 2019.
- (3) Mr. Loeb's target and actual cash incentive compensation amounts were prorated to reflect that he commenced employment with us in July 2019.
- (4) Dr. Ramelmeier's target and actual cash incentive compensation amounts were prorated to reflect that (i) his 2019 base salary was \$375,950 from January 1, 2019 through September 15, 2019 and (ii) his 2019 base salary was \$400,000 from September 16, 2019 through December 31, 2019.
- (5) Ms. Yi resigned from the Company in June 2019.

2019 Equity Compensation

Our current practice is to make equity grants at the beginning of the fiscal year after our operating plan has been approved by the Board of Directors and the performance in the prior fiscal year completed. Accordingly, the Compensation Committee approved the grant of stock options and RSU awards to Dr. Macrae, Mr. Boissel, Dr. Ramelmeier, and Ms. Yi in February 2019.

The Compensation Committee considered the approach used when determining the form and size of prior grants, the size of 2018 equity grants, the percent of common stock outstanding as well as grant date value, to determine the overall range for setting the pool of shares available for grants to executive officers and other employees in 2019 and the size of each executive's grant. In general, the equity compensation of our named executive officers for 2019 fell within the competitive range of the 50th to 75th percentiles based on the market data provided by Radford.

In connection with the commencement of their respective employment with the Company, after taking into consideration each executive officer's compensation at his prior employer and competitive positioning based on the market data derived by Radford from the peer group that ranges from the 50th to the 75th percentiles, Messrs. Lee and Loeb and Dr. Woolfson were granted a stock option to acquire 262,500 shares of common stock, 250,000 shares of common stock, and 250,000 shares of common stock, respectively, each with an exercise price equal to the closing price per share on the respective grant date. Each stock option is subject to a four-year vesting schedule, with 25% of the shares subject to the option vesting 12 months from the grant date and the remainder vesting in equal monthly installments for 36 months thereafter, provided that the executive officer remains a full-time employee through each vesting date. In addition, Mr. Lee was granted a RSU award covering 43,750 shares of common stock. Mr. Lee's RSU award is subject to a three-year vesting schedule, with one-third of the shares subject to the RSU award vesting in a series of three successive equal installments upon completion of each year of service measure from the grant date.

Other Elements of Executive Compensation Program

The remaining elements of our executive compensation program, like our broader employee compensation programs, are intended to make our overall compensation program competitive with those of our peer companies and all of the remaining elements of our executive compensation program (401(k) Plan; Medical, Dental, and Vision Plans; Life and Disability Insurance; and the Purchase Plan) are available to all of our employees.

Effective as of January 1, 2019, we revised our vacation policy to move away from an accrued paid time off, or PTO, policy to a flexible PTO policy without accrual. In connection with this policy change, our employees, including Dr. Macrae and Ms. Yi, received a one-time payout for any unused and accrued PTO.

In 2019, Mr. Lee was granted a \$200,000 sign-on bonus in connection with the commencement of his employment with the Company in October 2019. If Mr. Lee's employment with us terminates within one year of his appointment, either by the Company for cause or by him for good reason, Mr. Lee's sign-on bonus will be subject to repayment.

In 2019, Dr. Woolfson was granted a \$150,000 sign-on bonus in connection with the commencement of his employment with the Company in January 2019. If Dr. Woolfson's employment with us had terminated before the one-year anniversary of his appointment, either by the Company for cause or by him for good reason, Dr. Woolfson's sign-on bonus would have been subject to repayment.

In December 2019, Dr. Ramelmeier was granted a \$100,000 special cash bonus to recognize his contributions and the critical importance of his leadership and experience in manufacturing, especially as the Company completes the buildout of its manufacturing facilities in Brisbane and Valbonne. Dr. Ramelmeier's special cash bonus will be paid in four equal installments between July 2020 and December 2021, subject to Dr. Ramelmeier's continued full-employment with the Company through and including each payment date.

Additional Compensation Information

Severance Arrangements

In March 2017, the Compensation Committee adopted an Executive Severance Plan, or the Severance Plan, to provide severance benefits to certain of our executive officers and other key employees, including our named executive officers, whose employment terminates under certain prescribed circumstances. In February 2019, the Compensation Committee approved an Amended and Restated Executive Severance Plan, or the Amended Severance Plan, to increase certain severance payments, as described below under "—Employment Contracts and Change in Control Arrangements—Executive Severance Plan." The Amended Severance Plan provides financial protection against the potential loss of employment in designated circumstances, which the Compensation Committee believes will allow the executives to focus attention on the best interests of the stockholders, without undue concern as to an executive's own financial situation. The Compensation Committee has been advised by its independent compensation consultant that the benefits provided under these agreements are consistent with peer company and broader market practices, and are fair and reasonable.

Tax and Accounting Effects of Executive Compensation

Under Section 162(m) of the Code, or Section 162(m), compensation paid to any publicly held corporation's "covered employees" that exceeds \$1 million per taxable year for any covered employee is generally non-deductible.

Prior to the enactment of the Tax Cuts and Jobs Act, Section 162(m) provided a performance-based compensation exception, pursuant to which the deduction limit under Section 162(m) did not apply to any compensation that qualified as "performance-based compensation" under Section 162(m). Pursuant to the Tax Cuts and Jobs Act, the performance-based compensation exception under Section 162(m) was repealed with respect to taxable years beginning after December 31, 2017, except that certain transition relief is provided for compensation paid pursuant to a written binding contract which was in effect on November 2, 2017 and which is not modified in any material respect on or after such date.

Compensation paid to each of the Company's "covered employees" in excess of \$1 million per taxable year generally will not be deductible unless it qualifies for the performance-based compensation exception under Section 162(m) pursuant to the transition relief described above. Because of certain ambiguities and uncertainties as to the application and interpretation of Section 162(m), as well as other factors beyond the control of the Compensation Committee, no assurance can be given that any compensation paid by the Company will be eligible for such transition relief and be deductible by the Company in the future. Although the Compensation Committee will continue to consider tax implications as one factor in determining executive compensation, the Compensation Committee also looks at other factors in making its decisions and retains the flexibility to provide compensation for the Company's named executive officers in a manner consistent with the goals of the Company's executive compensation program and the best interests of the Company and its stockholders, which may include providing for compensation that is not deductible by the Company due to the deduction limit under Section 162(m). The Compensation Committee also retains the flexibility to modify compensation that was initially intended to be exempt from the deduction limit under Section 162(m) if it determines that such modifications are consistent with the Company's business needs.

The Compensation Committee also considers the impact of Section 409A of the Code, and in general, our executive plans and programs are designed to comply with the requirements of that section so as to avoid possible adverse tax consequences that may result from non-compliance.

The accounting impact of our compensation programs is one of many factors that the Compensation Committee considers in determining the structure and size of our executive compensation programs. In general, the Company accounts for equity compensation paid to our employees under ASC 718, which requires us to estimate and record an expense over the service period of the equity award, and our cash compensation is recorded as an expense at the time the obligation is accrued.

Equity Grant Timing

Equity awards are generally granted to employees, including executives, when they are hired, and employees are eligible for additional equity awards in connection with annual performance reviews each year. In 2018, the Compensation Committee determined that with respect to equity awards granted to any new employee, such awards would be granted on the 25th day of the month (or if such 25th day is not a trading day, the immediately preceding trading day of that month) immediately following the month of the employee's hire date; and with respect to annual equity awards, such awards would be granted on the 25th day of February (or if such 25th day is not a trading day, the immediately preceding trading day in February), provided the Compensation Committee approves the terms of the grants before such date. Because these grant dates are pre-established, the timing of the release of material non-public information does not affect the grant dates for equity awards, and Sangamo does not time the release of material non-public information based on equity award grant dates.

Summary Compensation Table

The following table provides certain summary information for the years ended December 31, 2019, 2018 and 2017, when applicable, concerning the compensation earned by (i) our President and Chief Executive Officer, (ii) our Executive Vice President and Chief Financial Officer, (iii) our former Executive Vice President and Chief Financial Officer, (iv) our Executive Vice President, Corporate Strategy and former interim Chief Financial Officer, and (v) our three other most highly compensated executive officers who were serving as executive officers at the end of 2019. These individuals are referred to throughout this Proxy Statement as our "named executive officers." We have omitted certain rows from the table when there is no disclosure of any compensation for the named executive officer for that fiscal year.

Name and Principal Position	Year	Salary (\$)	Bonus (\$)		Stock Awards (\$ (1))	Option Awards (\$ (2))	Non-Equity Incentive Plan Compensation (\$ (3))	All Other Compensation (\$ (4))	Total (\$)
(a)	(b)	(c)	(d)		(e)	(f)	(g)	(i)	(j)
Alexander D. Macrae	2019	661,939	—		571,148	2,274,230	436,880	42,358	3,986,555
President and	2018	636,480	—		631,575	2,410,657	420,077	5,639	4,104,428
Chief Executive Officer	2017	612,000	—		—	795,564	381,888	6,404	1,795,856
Sung H. Lee	2019	72,500	200,000	(6)	452,813	1,757,679	47,415	273	2,530,680
Executive Vice President and Chief Financial Officer (5)									
Stéphane Boissel	2019	483,600	—		158,025	629,234	212,784	1,639	1,485,282
Executive Vice President, Corporate Strategy and former Interim Chief Financial Officer (7) (8)	2018	120,390	100,000	(9)	—	2,052,792	—	316,884	2,590,066
Adrian Woolfson	2019	449,732	150,000	(11)	—	1,498,175	207,100	5,503	2,310,510
Executive Vice President, Research and Development (10)									
Gary H. Loeb	2019	166,667	—		—	1,788,475	87,200	683	2,043,025
Executive Vice President, General Counsel and Secretary (12)									
R. Andrew Ramelmeier	2019	382,965	—		112,875	449,453	153,608	5,639	1,104,540
Executive Vice President, Technical Operations (13)									
Kathy Y. Yi	2019	175,428	—		173,828	692,157	—	28,174	1,069,587
Former Executive Vice President and Chief Financial Officer (14)	2018	404,833	—		145,363	554,884	155,861	5,639	1,266,580
	2017	294,358	—		—	574,560	120,377	4,710	994,005

- (1) The amounts in column (e) reflect the aggregate grant date fair value of the RSUs awarded to the named executive officer for the applicable year, calculated in accordance with ASC 718, without taking into account any estimated forfeitures. The grant date fair value of the RSUs is measured based on the closing price of the underlying common stock on the date of grant.
- (2) The amounts in column (f) represent the aggregate grant date fair value of the stock option grants for each indicated year in accordance with ASC 718 using the Black-Scholes option valuation model and without taking into account any estimated forfeitures. The assumptions used in the calculation of such grant date fair values are described in Note 4 of the Notes to Consolidated Financial Statements included in the 2019 Form 10-K.
- (3) The amounts in column (g) reflect the cash bonus awards made to the named executive officer under the cash incentive program under the Incentive Plan for the indicated year.

- (4) The amounts in column for 2019 (i) include matching payments made to the named executive officer under our 401(k) Plan, a qualified deferred compensation plan under Section 401(k) of the Code (\$4,000 for each of Dr. Macrae, Dr. Woolfson, Dr. Ramelmeier and Ms. Yi); life insurance premiums paid by us on behalf of the named executive officer in the amount of \$1,639 for each of Dr. Macrae, Mr. Boissel, and Dr. Ramelmeier; \$1,503 for Dr. Woolfson; \$683 for Mr. Loeb; and \$820 for Ms. Yi; and vacation payouts of \$36,719 and \$23,355 for Dr. Macrae and Ms. Yi, respectively.
- (5) Mr. Lee was appointed as our Executive Vice President and Chief Financial Officer effective October 31, 2019.
- (6) Consists of a sign-on bonus that is subject to repayment in the event Mr. Lee's employment is terminated for cause or by him without good reason within one year of his appointment.
- (7) Mr. Boissel joined our company on October 2, 2018 in connection with the Sangamo France acquisition as our Executive Vice President, Corporate Strategy. He also served as our Interim Chief Financial Officer from June 7, 2019 through October 31, 2019.
- (8) In 2018, certain amounts paid to Mr. Boissel were paid by Sangamo France in Euro, and converted to U.S. dollars at an exchange rate of €1.00 = \$1.1456, the noon buying rate as reported by the Federal Reserve Bank of New York on December 31, 2018.
- (9) Consists of a sign-on bonus that was subject to repayment in the event Mr. Boissel's employment was terminated for cause or by him without good reason within one year of his appointment.
- (10) Dr. Woolfson was appointed our Executive Vice President, Research and Development effective January 21, 2019.
- (11) Consists of a sign-on bonus that was subject to repayment in the event Dr. Woolfson's employment was terminated for cause or by him without good reason within one year of his appointment.
- (12) Mr. Loeb was appointed our Executive Vice President and General Counsel effective July 30, 2019 and our Secretary effective September 16, 2019.
- (13) Dr. Ramelmeier was promoted to the position of Executive Vice President, Technical Operations effective September 16, 2019. Dr. Ramelmeier was hired on January 1, 2018 as our Senior Vice President, Technical Operations and did not serve as an executive officer of Sangamo during any portion of 2018.
- (14) Ms. Yi was appointed our Senior Vice President and Chief Financial Officer on February 28, 2017 and resigned effective June 7, 2019.

Grants of Plan-Based Awards

The following table shows for the fiscal year ended December 31, 2019, certain information regarding grants of plan-based awards to our named executive officers.

Name	Award Type	Grant Date	Approval Date	Estimated Possible Payouts Under Non-Equity Incentive Plan Awards		All Other Stock Awards: Number of Shares of Stock or Units (#) (2)	All Other Option Awards: Number of Securities Underlying Options (#) (3)	Exercise or Base Price of Option or Stock Awards (\$/Sh) (l)	Grant Date Fair Value of Stock and Option Awards (\$) (4)
				Target (\$) (1)	Maximum (\$) (1)				
(a)		(b)		(d)	(e)	(j)	(k)	(l)	(m)
Alexander D. Macrae	Annual Cash			397,163	794,326	—	—	—	—
	Annual RSU Grant	43521	43521	—	—	63,250	—	—	571,148
	Annual Option Grant	43521	43521	—	—	—	379,500	9.03	2,274,230
Sung H. Lee	Annual Cash			43,500	87,000	—	—	—	—
	New Hire RSU Grant	11/25/2019	11/25/2019	—	—	43,750	—	—	452,813
	New Hire Option Grant	11/25/2019	11/25/2019	—	—	—	262,000	10.35	1,757,679
Stéphane Boissel	Annual Cash			193,440	386,880	—	—	—	—
	Annual RSU Grant	02/25/2019	43521	—	—	17,500	—	—	158,025
	Annual Option Grant	02/25/2019	43521	—	—	—	105,000	9.03	629,234
Adrian Woolfson	Annual Cash			190,000	380,000	—	—	—	—
	New Hire Option Grant	02/25/2019	02/25/2019	—	—	—	250,000	9.03	1,498,175
Gary H. Loeb	Annual Cash			80,000	160,000	—	—	—	—
	New Hire Option Grant	08/23/2019	43700	—	—	—	250,000	11.02	1,788,475
R. Andrew Ramelmeier	Annual Cash			139,644	279,288	—	—	—	—
	Annual RSU Grant	43521	43521	—	—	12,500	—	—	112,875
	Annual Option Grant	43521	43521	—	—	—	75,000	9.03	449,453
Kathy Y. Yi	Annual Cash			168,410	336,820	—	—	—	—
	Annual RSU Grant	43521	43521	—	—	19,250	—	—	173,828
	Annual Option Grant	43521	43521	—	—	—	115,500	9.03	692,157

- (1) The dollar amounts represent the target and maximum amounts of each named executive officer's potential annual cash bonus award for the year ended December 31, 2019 pursuant to the 2019 Cash Incentive Compensation Program under the Incentive Plan. In Mr. Lee's and Mr. Loeb's case, the amounts reflect pro-rata as they commenced employment in October 2019 and July 2019, respectively. In Dr. Ramelmeier's case, the amount reflects pro-rata as he was promoted in September 2019. The amount shown as target reflects the target payment level if Sangamo and each individual had achieved 100% of the corporate and individual performance goals established pursuant to the Incentive Plan. Each of Mr. Lee's, Mr. Boissel's, Mr. Loeb's, Dr. Woolfson's, Dr. Ramelmeier's and Ms. Yi's target bonuses were allocated between corporate and individual performance (90% to 10%, respectively), and Dr. Macrae's target bonus was allocated 100% to corporate performance. The Compensation Committee determines the level of attainment of the corporate performance objectives following the end of the performance period. The amount shown as maximum reflects the payment level pursuant to the 2019 Cash Incentive Compensation Program if Sangamo had achieved a 200% corporate performance percentage and each individual (other than Dr. Macrae) had achieved a 200% individual performance percentage, which were the maximum percentages allowed for the corporate and individual performance percentages. Actual payouts differed based on the actual performance objectives achieved. The actual cash bonus award earned for the year ended December 31, 2019 pursuant to the 2019 Cash Incentive Compensation Program for each named executive officer is set forth in the Summary Compensation Table above. As such, the amounts set forth in these columns do not represent additional compensation earned by the named executive officers for the year ended December 31, 2019. For more information regarding the 2019 Cash Incentive Compensation Program, see "—Compensation Discussion and Analysis—2019 Compensation Decisions—2019 Cash Incentive Compensation" above and "—Employment Agreements and Compensation Arrangements—Annual Cash Bonus Awards" below.
- (2) The reported RSU award was granted under the 2013 Plan and will vest and become exercisable in accordance with the following schedule: 1/3rd of the shares vest in three equal annual installments over the three-year period measured from the grant date, provided the grantee continues to provide services through each applicable vesting date.
- (3) The reported option was granted under the 2018 Plan and will vest and become exercisable in accordance with the following schedule: 25% of the option shares will vest and become exercisable on the one year anniversary of the option grant date

and the remaining option shares will vest and become exercisable in 36 equal monthly installments over the 36- month period measured from the first anniversary of the option grant date, provided the optionee continues to provide services through each applicable vesting date.

- (4) Represents the grant date fair value of such stock option and RSU as determined in accordance with ASC 718. The assumptions used in the calculation of the grant date fair values are included in Note 9 of the Notes to Consolidated Financial Statements in the 2019 Form 10-K.

Employment Agreements and Compensation Arrangements

Employment Agreements

Each of our named executive officers has entered into a written employment agreement with our company. For a description of these employment agreements, please see the section of this Proxy Statement under the heading “—Employment Contracts and Change in Control Arrangements” below.

Annual Cash Bonus Awards

In March 2018, the Compensation Committee of the Board adopted the Incentive Plan, which amended and restated the prior plan adopted in 2012, and is a performance-based cash incentive program for our executive officers. Under the Incentive Plan, unless the Compensation Committee determines otherwise, each performance period shall be coincident with the calendar year. The Compensation Committee establishes the specific corporate objectives and/or individual objectives that must be attained in order for Incentive Plan participants to receive a bonus for that performance period. For each performance and individual objective, the Compensation Committee may set threshold and target levels of attainment. The Compensation Committee will then establish for each participant dollar levels for the bonus to which he or she may become entitled for that performance period based on the level at which the corporate objectives and/or individual objectives are actually attained.

Performance objectives established under the Incentive Plan are based on one or more of the following criteria: (i) revenue, organic revenue, net sales, or new-product revenue, (ii) achievement of specified milestones in the discovery and development of the Company’s technology or of one or more of the Company’s products, (iii) achievement of specified milestones in the commercialization of one or more of the Company’s products, (iv) achievement of specified milestones in the manufacturing of one or more of the Company’s products, (v) expense targets, (vi) share price, (vii) total stockholder return, (viii) earnings per share, (ix) operating margin, (x) gross margin, (xi) return measures (including, but not limited to, return on assets, capital, equity, or sales), (xii) productivity ratios, (xiii) operating income, (xiv) net operating profit, (xv) net earnings or net income (before or after taxes), (xvi) cash flow (including, but not limited to, operating cash flow, free cash flow and cash flow return on capital), (xvii) earnings before or after interest, taxes, depreciation, amortization and/or stock-based compensation expense, (xviii) economic value added, (xix) market share, (xx) working capital targets, (xxi) achievement of specified milestones relating to corporate partnerships, collaborations, license transactions, distribution arrangements, mergers, acquisitions, dispositions or similar business transactions, (xxii) employee retention and recruiting and human resources management, and (xxiii) other corporate performance criteria approved by the Compensation Committee.

Individual performance objectives established under the Incentive Plan are based on one or more of the following criteria: (i) the participant’s contribution toward the achievement of a specific corporate objective, (ii) the contribution of the business unit or division supervised by the participant toward the achievement of a specific corporate objective, and (iii) the participant’s development of professional skills.

A participant will not become entitled to a bonus under the Incentive Plan for a particular performance period unless the participant is employed on or before October 31st of the applicable performance period. Following the close of the applicable performance period, the Compensation Committee will determine the actual bonus amount for each participant based on the actual levels at which the actual performance objectives are attained, and bonuses will be paid promptly following the end of the applicable performance period.

In the event any payment to which a participant becomes entitled under the Incentive Plan would otherwise constitute a parachute payment under Section 280G of the Code, then that payment will be subject to reduction to the extent necessary to assure that such payment will be limited to the greater of (i) the dollar amount that can be paid to the participant without triggering a parachute payment under Code Section 280G or (ii) the dollar amount of that payment which provides the participant with the greatest after-tax amount after taking into account any excise tax the participant may incur under Code Section 4999 with respect to such payment and any other benefits or payments to which the participant may be entitled in connection with any change in control of the Company or the subsequent termination of the participant’s employment.

We adopted a 2019 Cash Incentive Compensation Program under the Incentive Plan that provides for annual bonus awards to reward executive officers based on our achievement of specific corporate goals and their achievement of individual performance goals. For more information regarding the 2019 Cash Incentive Compensation Program under the Incentive Plan, please see the

section of this Proxy Statement under the heading “—Compensation Discussion and Analysis—2019 Compensation Decisions—2019 Cash Incentive Compensation” and footnote (1) to the Grants of Plan-Based Awards table above.

Stock Awards

Discretionary options that we granted in 2019 under the 2018 Plan vest according to the following schedule: 25% of the option shares will vest and become exercisable on the one year anniversary of the option grant date and the remaining option shares will vest and become exercisable in 36 equal monthly installments over the 36-month period measured from the first anniversary of the option grant date, provided the executive officer continues to provide services through each applicable vesting date. Each option will vest on an accelerated basis in connection with certain terminations and changes, as described under the heading “—Employment Contracts and Change in Control Agreements” below. Each option has an expiration date at the end of the 10-year period measured from the grant date, unless terminated earlier following the optionee’s termination of service. Options granted under the 2018 Plan have an exercise price equal to the fair market value on the date of grant (generally the closing price of our common stock on the grant date on the Nasdaq Global Select Market), and the 2018 Plan permits the exercise price of stock options to be paid by cash, check, other shares of our common stock (with some restrictions), broker assisted same-day sales, and cashless “net exercise” arrangements. Although we did not grant any discretionary RSUs in 2019 under the 2018 Plan, grants of discretionary RSUs in February 2019 to executive officers under such plan vest in three successive equal annual installments over the three-year period measured from the grant date, provided the executive officer continues to provide services through each applicable vesting date. For a discussion of the effect on outstanding equity awards under the 2018 Plan in connection with certain terminations and changes in control of the Company, including accelerated vesting, see the discussion under the heading “—Employment Contracts and Change in Control Arrangements” below.

Other Compensatory Arrangements

401(k) Plan. Our executive officers are eligible to participate in the 401(k) Plan. The 401(k) Plan is intended to qualify as a tax-qualified plan under Section 401 of the Code. The 401(k) Plan provides that each participant may contribute a portion of his or her pre-tax compensation, up to a statutory annual limit. The 401(k) Plan also permits us to make discretionary contributions and matching contributions, subject to established limits. In 2019, we made a matching contribution, which was subject to an annual limit of \$4,000 per employee.

Other Benefits. Our executive officers are eligible to participate in all of our benefit plans, such as our medical, dental, vision, short-term disability, long-term disability and group life insurance plans and the Purchase Plan, in each case generally on the same basis as other employees. We also have a Section 125 flexible benefits healthcare plan and a flexible benefits childcare plan under which employees can set aside pre-tax funds to pay for qualified healthcare expenses and qualified childcare expenses not reimbursed by insurance, respectively. We do not currently offer pension or other retirement benefits in the United States, but do offer pension or other retirement benefits in certain other countries.

Outstanding Equity Awards at Fiscal Year-End

The following table provides certain summary information concerning outstanding equity awards held by the named executive officers as of December 31, 2019.

Name	Grant Date	Option Awards				Stock Awards	
		Number of Securities Underlying Unexercised Options (#) Exercisable (1)	Number of Securities Underlying Unexercised Options (#) Unexercisable (1)	Option Exercise Price (\$)	Option Expiration Date	Number of Shares or Units of Stock that Have Not Vested (#) (2)	Market Value of Shares or Units of Stock That Have Not Vested (\$) (3)
(a)		(b)	(c)	(d)	(e)	(f)	(g)
Alexander D. Macrae	43521	—	379,500	9.03	47173	—	—
	43124	90,562	98,438	20.05	46775	—	—
	42761	262,500	97,500	3.50	46412	—	—
	6/3/2016	612,500	87,500	7.07	6/2/2026	—	—
	43521	—	—	—	—	63,250	529,403
	43124	—	—	—	—	21,000	175,770
Sung H. Lee (4)	43794	—	262,000	10.35	47446	—	—
	43794	—	—	—	—	43,750	366,188
Stéphane Boissel	43521	—	105,000	9.03	47173	—	—
	43427	76,787	206,736	11.08	47079	—	—
	43521	—	—	—	—	17,500	146,475
Adrian Woolfson	43521	—	250,000	9.03	47173	—	—
Gary H. Loeb (5)	43700	—	250,000	11.02	47352	—	—
R. Andrew Ramelmeier	43521	—	75,000	9.03	47173	—	—
	43131	57,500	62,500	20.85	46782	—	—
	43521	—	—	—	—	12,500	104,625

- (1) Except as otherwise provided in the footnotes below, each option was subject to the following vesting schedule: 25% of the option shares will vest and become exercisable on the one year anniversary of the option grant date and the remaining option shares will vest and become exercisable in 36 equal monthly installments over the 36-month period measured from the first anniversary of the option grant date, provided the executive officer continues to provide services through each applicable vesting date. Each option will vest on an accelerated basis in connection with certain terminations and changes in control, as described under the heading “—Employment Contracts and Change in Control Agreements.” Each option has an expiration date at the end of the 10-year period measured from the grant date, unless terminated earlier following the optionee’s termination of service.
- (2) Represents an RSU award subject to vesting in three successive equal annual installments over the three-year period measured from the grant date, provided the executive officer continues to provide services to the Company through each applicable vesting date. The award will vest on an accelerated basis in connection with certain terminations and changes in control of the Company, as described under the heading “—Employment Contracts and Change in Control Arrangements.”
- (3) Based on the \$8.37 closing price of our common stock on December 31, 2019, the last trading day of fiscal 2019.
- (4) Mr. Lee’s option was subject to the following vesting schedule: 25% of the option shares will vest and become exercisable on the one year anniversary of employment start date (October 31, 2020) and the remaining option shares will vest and become exercisable in 36 equal monthly installments over the 36-month period measured from the first anniversary of the employment start date, provided the executive officer continues to provide services through each applicable vesting date. The RSU award vests in a series of three successive equal installments upon completion of each year of service measured from the grant date. The option and RSU will vest on an accelerated basis in connection with certain terminations and changes in control, as described under the heading “—Employment Contracts and Change in Control Agreements.” The option has an expiration date at the end of the 10-year period measured from the grant date, unless terminated earlier following the optionee’s termination of service.
- (5) Mr. Loeb’s option was subject to the following vesting schedule: 25% of the option shares will vest and become exercisable on the one year anniversary of employment start date (July 30, 2019) and the remaining option shares will vest and become exercisable in 36 equal monthly installments over the 36-month period measured from the first anniversary of the employment start date, provided the executive officer continues to provide services through each applicable vesting date. The option will vest on an accelerated basis in connection with certain terminations and changes in control, as described under the heading

“—Employment Contracts and Change in Control Agreements.” The option has an expiration date at the end of the 10-year period measured from the grant date, unless terminated earlier following the optionee’s termination of service.

Option Exercises and Stock Vested

The following table sets forth the number of shares of our common stock acquired and the value realized upon the vesting of RSU awards and on each exercise of stock options for each of the named executive officers during the year ended December 31, 2019:

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)
(a)	(b)	(c)	(d)	(e)
Alexander D. Macrae	—	—	10,500	116,550
Sung H. Lee	—	—	—	—
Stéphane Boissel	—	—	—	—
Adrian Woolfson	—	—	—	—
Gary H. Loeb	—	—	—	—
R. Andrew Ramelmeier	—	—	—	—
Kathy Y. Yi	62,500	423,742	2,417	26,829

- (1) Value realized is determined by multiplying (i) the amount by which the market price of the common stock on the date of exercise exceeded the exercise price by (ii) the number of shares for which the options were exercised.
- (2) Value realized is determined by multiplying (i) the market price of the common stock on the date of vesting by (ii) the number of shares acquired on vesting.

Pension Benefits

We do not sponsor a tax-qualified defined benefit retirement plan or a supplemental executive retirement plan.

Nonqualified Deferred Compensation

We do not sponsor a nonqualified deferred compensation plan.

Risk Assessment of Compensation Policies and Practices

Our compensation programs throughout the organization are designed to maintain an appropriate balance between long-term and near-term incentives by utilizing a combination of compensation components, including base salary, annual cash incentive awards, and long-term equity awards. Although not all employees in the organization may have compensation comprising all three components, the compensation programs are generally structured so that any near-term cash incentives are not likely to constitute the predominant element of an employee’s total compensation. The Compensation Committee annually reviews our compensation policies and practices to assess whether they encourage employees to take inappropriate risks. After reviewing each of our compensation plans, and the checks and balances built into, and oversight of, each plan, in March 2020, the Compensation Committee determined that any risks arising from our compensation policies and practices for our employees are not reasonably likely to have a material adverse effect on us as a whole. In addition, the Compensation Committee believes that the mix and design of the elements of executive compensation do not encourage management to assume excessive risks, and significant compensation decisions, as well as decisions concerning the compensation of our executive officers, include subjective considerations by the compensation committee or the board of directors, which restrain the influence of formulae or objective factors on excessive risk taking. Finally, the mix of short-term compensation (in the form of salary and annual bonus, if any) and long-term compensation (in the form of stock options and RSUs) also prevents undue focus on short-term results and helps align the interests of our executive officers with the interests of our stockholders.

Employment Contracts and Change in Control Arrangements

Chief Executive Officer Employment Agreement

Dr. Macrae

In May 2016 we entered into an employment agreement with Dr. Macrae that took effect June 1, 2016, which sets forth the terms and conditions of his employment as President and Chief Executive Officer. Pursuant to his employment agreement, Dr. Macrae will receive a base salary and an annual cash bonus based upon our company’s achievement of specified objectives

under our Incentive Plan with a target cash bonus based on a percentage of his base salary. Dr. Macrae's base salary and target bonus percentage are subject to annual review by the Compensation Committee and adjustment from time to time by such Committee, and was subject to pro-ration for partial service in 2016. In 2019, Dr. Macrae's base salary was \$661,939 and his target cash bonus was 60% of his base salary.

Dr. Macrae's employment agreement also provided for a \$200,000 sign-on bonus, which was subject to repayment in the event Dr. Macrae's employment was terminated with cause or by him without good reason within one year of his appointment, as well as an initial equity grant of stock options under the 2013 Plan to acquire 700,000 shares of our common stock, which is vesting on the same terms as other discretionary awards under the 2013 Plan. Dr. Macrae is also entitled to be nominated for election to our Board of Directors for so long as his employment agreement is in effect.

Although Dr. Macrae's employment agreement includes certain benefits payable to him in connection with separation from service, such terms were waived by Dr. Macrae in connection with the March 2017 adoption of the Severance Plan, as amended and restated in February 2019 by the Amended Severance Plan, which now governs his severance benefits. The terms of the Severance Plan and Amended Severance Plan are described below under "—Executive Severance Plan."

Executive Vice President Employment Agreements

Mr. Lee

Effective October 31, 2019, we entered into an employment agreement with Mr. Lee setting forth the terms and conditions of his employment as an Executive Vice President and Chief Financial Officer. Pursuant to his employment agreement, Mr. Lee received an initial base salary of \$435,000 per year, and an annual cash bonus based upon our company's and his individual achievement of specified objectives under our Incentive Plan with a target cash bonus of 40% of his base salary. Mr. Lee's base salary and target bonus percentage are subject to annual review by the Compensation Committee and adjustment from time to time by such Committee, and his salary was subject to pro-ration for partial service in 2019.

Mr. Lee's employment agreement also provided for a \$200,000 sign-on bonus, which is subject to repayment in the event Mr. Lee's employment is terminated with cause or by him without good reason within one year of his appointment, as well as an initial equity grant of stock options under the 2018 Plan to acquire 262,500 shares of our common stock and a restricted stock award covering 43,750 shares of our common stock, both of which vest on the same terms as other discretionary awards under the 2018 Plan.

In addition, Mr. Lee's employment agreement provides that he will be eligible to receive certain severance benefits under the Amended Severance Plan, which is described below.

Mr. Boissel

In connection with our acquisition of Sangamo France, we entered into an employment agreement with Mr. Boissel in October 2018, setting forth the terms and conditions of his employment as our Executive Vice President, Corporate Strategy. Mr. Boissel was the former Chief Executive Officer of Sangamo France. Pursuant to his employment agreement, Mr. Boissel will receive an initial base salary of \$480,000 per year, and an annual cash bonus based upon our company's and his individual achievement of specified objectives under our Incentive Plan with a target cash bonus of 40% of his base salary. Under the terms of his employment agreement, Mr. Boissel was employed on a part-time basis through December 31, 2018, during which time his salary was at a rate of \$140,000 per year. Mr. Boissel continued to receive compensation under his management contract with Sangamo France through December 31, 2018. Mr. Boissel's base salary and target bonus percentage are subject to annual review by the Compensation Committee and adjustment from time to time by such Committee, and his salary was subject to pro-ration for partial service and part-time basis in 2018. In 2019, Mr. Boissel's base salary was \$483,600 and his target cash bonus was 40% of his base salary.

Mr. Boissel's employment agreement also provided for a \$100,000 sign-on bonus, which was subject to repayment in the event Mr. Boissel's employment was terminated with cause or by him without good reason within one year of his appointment, as well as an initial equity grant of stock options under the 2018 Plan to acquire 215,000 shares of our common stock, which is vesting on the same terms as other discretionary awards under the 2018 Plan. Further, in connection with our acquisition of Sangamo France, Mr. Boissel, as an employee of Sangamo France, was granted a stock option under the 2018 Plan to acquire 68,523 shares of common stock with an exercise price equal to the closing price per share on the grant date. The stock option is subject to a four-year vesting schedule with 25% of the shares subject to the option vesting upon Mr. Boissel's completion of one year of service measured from the option grant date and the balance of the shares vesting monthly thereafter for the next three years.

In addition, Mr. Boissel's employment agreement provided that he will be eligible to receive certain severance benefits under the Severance Plan, as amended and restated in February 2019 by the Amended Severance Plan, which is described below.

Dr. Woolfson

Effective January 21, 2019, we entered into an employment agreement with Dr. Woolfson setting forth the terms and conditions of his employment as an Executive Vice President, Research and Development. Pursuant to his employment agreement, Dr. Woolfson received an initial base salary of \$475,000 per year, and an annual cash bonus based upon our company's and his individual achievement of specified objectives under our Incentive Plan with a target cash bonus of 40% of his base salary. Dr. Woolfson's base salary and target bonus percentage are subject to annual review by the Compensation Committee and adjustment from time to time by such Committee, and his salary was subject to pro-ration for partial service in 2019.

Dr. Woolfson's employment agreement also provided for a \$150,000 sign-on bonus, which was subject to repayment in the event Dr. Woolfson's employment is terminated with cause or by him without good reason within one year of his appointment, as well as an initial equity grant of stock options under the 2018 Plan to acquire 250,000 shares of our common stock, which vests on the same terms as other discretionary awards under the 2018 Plan.

In addition, Dr. Woolfson's employment agreement provides that he will be eligible to receive certain severance benefits under the Severance Plan, as amended and restated in February 2019 by the Amended Severance Plan, which is described below.

Mr. Loeb

Effective July 29, 2019, we entered into an employment agreement with Mr. Loeb setting forth the terms and conditions of his employment as an Executive Vice President and General Counsel. Pursuant to his employment agreement, Mr. Loeb received an initial base salary of \$400,000 per year, and an annual cash bonus based upon our company's and his individual achievement of specified objectives under our Incentive Plan with a target cash bonus of 40% of his base salary. Mr. Loeb's base salary and target bonus percentage are subject to annual review by the Compensation Committee and adjustment from time to time by such Committee, and his salary was subject to pro-ration for partial service in 2019.

Mr. Loeb's employment agreement also provided for an initial equity grant of stock options under the 2018 Plan to acquire 250,000 shares of our common stock, which vests on the same terms as other discretionary awards under the 2018 Plan.

In addition, Mr. Loeb's employment agreement provides that he will be eligible to receive certain severance benefits under the Amended Severance Plan, which is described below.

Dr. Ramelmeier

Effective January 1, 2018, we entered into an employment agreement with Dr. Ramelmeier setting forth the terms and conditions of his employment as a Senior Vice President, Technical Operations. Effective September 16, 2019, Dr. Ramelmeier was promoted to Executive Vice President, Technical Operations and his base salary pursuant to his employment agreement was increased to \$400,000 per year and his target cash bonus was increased to 40% of his base salary. Dr. Ramelmeier's base salary and target bonus percentage are subject to annual review by the Compensation Committee and adjustment from time to time by such Committee.

Dr. Ramelmeier's employment agreement also provided for an initial equity grant of stock options under the 2013 Plan to acquire 120,000 shares of our common stock, which vests on the same terms as other discretionary awards under the 2013 Plan. In December 2019 the Compensation Committee approved a special cash bonus of \$100,000 to be paid to Dr. Ramelmeier in four equal payments of \$25,000 in July 2020, December 2020, July 2021 and December 2021.

In addition, Dr. Ramelmeier's employment agreement provides that he will be eligible to receive certain severance benefits under the Severance Plan, as amended and restated in February 2019 by the Amended Severance Plan, which is described below.

Ms. Yi

Effective February 28, 2017, we entered into an employment agreement with Kathy Y. Yi, which sets forth the terms and conditions of her employment as Chief Financial Officer. Pursuant to her employment agreement, Ms. Yi will receive a base salary (initially \$350,000 per year) and an annual cash bonus based upon our company's and her individual achievement of specified objectives under our Incentive Plan with a target cash bonus based on a percentage of her base salary (initially 35%). Ms. Yi's base salary and target bonus percentage are subject to annual review by the Compensation Committee and adjustment from time to time by such Committee, and were also subject to pro-ration for partial service in 2017. In 2019, Ms. Yi's base salary was \$421,026 and her target cash bonus was 40% of her base salary.

Ms. Yi's employment agreement also provided for an initial equity grant of stock options under the 2013 Plan to acquire 200,000 shares of our common stock, which is vesting on the same terms as other discretionary awards under the 2013 Plan.

Ms. Yi's employment agreement provided that she was eligible to receive certain severance benefits under the Severance Plan, as amended and restated in February 2019 by the Amended Severance Plan. As Ms. Yi voluntarily resigned in June 2019, she did not receive any payments or benefits under the Amended Severance Plan.

Executive Severance Plan

In February 2019, the Compensation Committee of the Board adopted the Amended Severance Plan, which amended and restated the Severance Plan.

Under the Amended Severance Plan, Dr. Macrae is eligible to receive the following severance benefits: (a) cash equal to the sum of (i) 18 months of his base salary and (ii) 1/12 of the target bonus for the year of termination multiplied by 18, payable over 12 months, reimbursement for his health care coverage costs under COBRA for 18 months, and full acceleration of his outstanding equity awards, and any outstanding options as so accelerated will remain exercisable for a period of 12 months following termination, in the event of an involuntary termination during the Change in Control Period or (b) cash equal to 18 months of his base salary, payable over 18 months, and COBRA reimbursement for 18 months, if he has an involuntary termination other than during the Change in Control Period.

Under the Amended Severance Plan, Mr. Lee, Mr. Boissel, Dr. Woolfson, Mr. Loeb and Dr. Ramelmeier are eligible (and had she not resigned, Ms. Yi would have been eligible) to receive the following severance benefits: (a) cash equal to the sum of (i) 15 months of base salary and (ii) 1/12 of the target bonus for the year of termination multiplied by 15, payable over 15 months, reimbursement for health care coverage costs under COBRA for 15 months, and accelerated vesting of all outstanding equity awards, and any outstanding options as so accelerated will remain exercisable for a period of 12 months following termination, in the event of an involuntary termination during the Change in Control Period; or (b) cash equal to 15 months of base salary, payable over 15 months, and COBRA reimbursement for 15 months, if there is an involuntary termination other than during the Change in Control Period.

If any of the severance benefits under the Amended Severance Plan would constitute a “parachute payment” within the meaning of Section 280G of the Code, such payments are subject to reduction to the extent doing so would put the recipient in a better after-tax position after taking into account any excise tax that may be incurred under Code Section 4999 in connection with any change in control of the Company or subsequent termination of employment.

2013 Plan

The Compensation Committee of the Board of Directors, as the administrator of the 2013 Plan, has the authority to provide that any outstanding options held by the Chief Executive Officer or any other executive officer or any other unvested equity award made to such individual under the 2013 Plan will vest on an accelerated basis in connection with certain changes in control of the Company or the subsequent termination of the officer’s employment following the change in control event. In addition, all outstanding options and RSUs under the 2013 Plan will immediately vest upon a change in control, to the extent not assumed or continued in effect by the successor entity or replaced with an incentive compensation program that preserves the intrinsic value of the award at that time and provides for the subsequent vesting and concurrent payout of that value in accordance with the pre-existing vesting schedules for those awards.

2018 Plan

The Board of Directors, or any committee properly constituted thereof, as the administrator of the 2018 Plan, has the authority to accelerate the time at which an equity award made under the 2018 Plan may first be exercised or vest on an accelerated basis in connection with certain changes in control of the Company. In addition, all outstanding options and RSUs under the 2018 Plan will immediately vest upon a change in control, to the extent not assumed or continued in effect by the successor entity or replaced with a similar incentive compensation program, for which the Board of Directors shall set the terms of any assumption, continuation or substitution.

Potential Payments Upon Termination or Change in Control as of December 31, 2019

The charts below quantify the potential payments our named executive officers, would receive under various scenarios. The value attributed to the accelerated vesting of equity awards represents the intrinsic value of each stock option or RSU award vesting on an accelerated basis in connection with the identified triggering event, which is assumed to occur on December 31, 2019. The intrinsic value is calculated by multiplying (i) the aggregate number of shares that vest on an accelerated basis by (ii) the amount by which the \$8.37 closing selling price per share of our common stock on December 31, 2019, exceeds the exercise price or other issue price (if any) payable per vested share. Because Ms. Yi voluntarily resigned effective June 7, 2019, she was not eligible for any potential payments or benefits under any of the various scenarios below as of December 31, 2019, and she did not receive any payments or benefits under our Amended Severance Plan or otherwise.

Quantification of Benefits Upon Involuntary Termination in the Absence of a Change in Control

The chart below quantifies the compensation each named executive officer would have received had the officer's employment terminated without cause in the absence of a change in control of the Company but under circumstances entitling the officer to severance benefits under the Amended Severance Plan.

Name	Cash Severance (\$) (1)	COBRA (\$)
Alexander D. Macrae	992,909	26,088
Sung H. Lee	543,750	36,258
Stéphane Boissel	604,500	26,094
Adrian Woolfson	593,750	26,094
Gary H. Loeb	500,000	10,763
R. Andrew Ramelmeier	500,000	26,094

- (1) Cash severance upon termination in the absence of a change in control is payable in a series of successive equal monthly installments over a period ranging from 15 months (named executive officers other than CEO) to 18 months (CEO).

Benefits Upon Involuntary Termination in Connection With a Change in Control

The chart below quantifies the payments our named executive officers would each have received had their employment terminated without cause or with good reason in connection with a change in control under circumstances entitling them to severance benefits under the Amended Severance Plan.

Name	Cash Severance (\$) (1)	Target Bonus (\$) (2)	Accelerated Vesting of Equity Awards (\$) (3)	COBRA (\$)
Alexander D. Macrae	992,909	595,745	1,293,748	26,088
Sung H. Lee	543,750	217,500	366,188	36,258
Stéphane Boissel	604,500	241,800	146,475	26,094
Adrian Woolfson	593,750	237,500	—	26,094
Gary H. Loeb	500,000	200,000	—	10,763
R. Andrew Ramelmeier	500,000	200,000	104,625	26,094

- (1) Cash severance upon termination in connection with a change in control is payable in a series of successive equal monthly installments over a period ranging from 15 months (named executive officers other than CEO) to 18 months (CEO).
- (2) Target bonus represents the amount of severance benefit that an executive is entitled to payable in a series of successive equal monthly installments over a period ranging from 15 months (named executive officers other than CEO) to 18 months (CEO).
- (3) No value is included in this table with respect to the accelerated vesting of options for which the exercise price was in excess of the closing price of our common stock on December 31, 2019.

Benefits Upon a Change in Control (No Termination)

The chart below quantifies the value of the accelerated equity the named executive officers are entitled to receive under the 2013 Plan and 2018 Plan upon a change in control of the Company in which their outstanding equity awards are not assumed or otherwise continued in effect, terminated or canceled in connection therewith.

Name	Accelerated Vesting of Equity Awards (\$)
Alexander D. Macrae	1,293,748
Sung H. Lee	366,188
Stéphane Boissel	146,475
Adrian Woolfson	—
Gary H. Loeb	—
R. Andrew Ramelmeier	104,625
Kathy Y. Yi	—

Benefits upon Death or Disability

Under the 2013 Plan, if a named executive officer's service with us is terminated as a result of death or permanent disability, or a named executive officer dies or becomes permanently disabled during the three months after a termination other than for misconduct, the period of time in which an option may be exercised following termination shall be the earlier of 12 months following the date of such named executive officer's death or the expiration date of the option, whichever is earlier, rather than the standard three-month post-termination exercise period provided for in the 2013 Plan or the 2018 Plan.

CEO Pay Ratio Disclosure

Under SEC rules, we are required to calculate and disclose the annual total compensation of our median employee, as well as the ratio of the annual total compensation of our median employee as compared to the annual total compensation of our President and Chief Executive Officer, Dr. Macrae (our "CEO"), for our last fiscal year ("CEO Pay Ratio"). To identify our median employee, we used the following methodology:

- To determine our total population of employees, we included all of our employees as of November 15, 2019 regardless of their full- or part-time schedule or anticipated employment duration.
- To identify our median employee from our employee population, we calculated the aggregate amount of the 2019 base compensation of each of our employees excluding the CEO using a reasonable estimate of the hours worked during 2019 for our hourly employees and actual salary paid for our remaining employees, target 2019 bonus, and the grant date fair value of equity awards granted in fiscal 2019 (using the same methodology we use for estimating the value of the equity awards granted to our named executive officers and reported in our Summary Compensation Table).
- In making this determination, we annualized the base compensation, target bonus and other cash incentive compensation of those permanent employees who were employed by us for less than the entire fiscal year.

Using this approach, we determined our median employee and determined their annual total compensation in accordance with the requirements of the Summary Compensation Table.

Accordingly, for fiscal 2019, the median of the annual total compensation of our employees (other than our CEO) was \$159,900 and the annual total compensation of our CEO, as reported in the Summary Compensation Table included in this Proxy Statement, was \$3,986,555. Based on this information, the ratio of the annual total compensation of our CEO to the median of the annual total compensation of all our employees was approximately 25 to 1.

The CEO Pay Ratio above represents our reasonable estimate calculated in a manner consistent with SEC rules and applicable guidance. SEC rules and guidance provide significant flexibility in how companies identify the median employee, and each company may use a different methodology and make different assumptions particular to that company. As a result, and as explained by the SEC when it adopted these rules, in considering the pay ratio disclosure, stockholders should keep in mind that the rule was not designed to facilitate comparisons of pay ratios among different companies, even companies within the same industry, but rather to allow stockholders to better understand and assess each particular company's compensation practices and pay ratio disclosures.

Neither the Compensation Committee nor our management used our CEO Pay Ratio measure in making compensation decisions.

COMPENSATION COMMITTEE REPORT¹

The Compensation Committee has reviewed and discussed the Compensation Discussion and Analysis contained in this Proxy Statement with management, and based on such review and such discussions, the Compensation Committee recommended to the Board of Directors that the Compensation Discussion and Analysis, as contained herein, be included in this Proxy Statement.

Submitted by the Compensation Committee of the
Board of Directors of Sangamo Therapeutics, Inc.

Ms. H. Stewart Parker
Dr. Karen L. Smith
Mr. Joseph S. Zakrzewski

¹ The material in this Compensation Committee Report is not “soliciting material,” is not deemed “filed” with the SEC and is not to be incorporated by reference into any filing of Sangamo Therapeutics, Inc. under the Securities Act of 1933, as amended, or the Securities Act, or the Exchange Act, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.

EQUITY COMPENSATION PLAN INFORMATION

The following table provides information as of December 31, 2019, with respect to the shares of our common stock that may be issued under our existing equity compensation plans. There are no outstanding options that we have assumed in connection with our acquisition of other companies, and there are currently no assumed plans under which we can grant options.

Plan Category	Column (A)			Column (B)			Column (C)		
	Number of Securities to be Issued Upon Exercise of Outstanding Options, Restricted Stock Units and Other Rights			Weighted-Average Exercise Price of Outstanding Options			Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column A)		
Equity Compensation Plans Approved by Stockholders (1)	10,528,137	(2)	(3)	\$ 10.64	(4)		9,448,809	(5)	(6)
Equity Compensation Plans Not Approved by Stockholders (1)	164,000		(7)	15.00			—	(6)	(8)
Total	10,692,137			10.71			9,448,809		

- (1) The equity compensation plans approved by stockholders consist of the 2013 Plan, the 2018 Plan and the Purchase Plan. In November 2017, the Compensation Committee approved the amendment and restatement of the 2013 Plan to reserve an additional 1,000,000 shares of our common stock to be used exclusively for grants of awards to individuals who were not previously employees or non-employee directors of the Company (or following a bona fide period of non-employment with the Company), as an inducement material to each such individual's entry into employment with us within the meaning of Rule 5635(c)(4) of the Nasdaq Listing Rules, or Rule 5635(c)(4) (such awards, the Inducement Awards). The 2013 Plan was amended and restated by the Compensation Committee without stockholder approval pursuant to Rule 5635(c)(4). Accordingly, for purposes of this table, information with respect to Inducement Awards and the shares reserved for issuance under the 2013 Plan therefor, are included in the row in the table above with respect to equity compensation plans not approved by stockholders.
- (2) Includes 862,850 shares subject to RSUs that will entitle the holder to one share of common stock for each unit that vests over the holder's period of continued service.
- (3) Excludes purchase rights accruing under the Purchase Plan and shares subject to outstanding options granted under the 2013 Plan as Inducement Awards (which Inducement Awards are included in the row in the table above with respect to equity compensation plans not approved by stockholders). Under the Purchase Plan, each eligible employee may purchase up to 2,000 shares of common stock at semi-annual intervals on the last U.S. business day of April and October each year at a purchase price per share equal to 85% of the lower of (i) the closing selling price per share of common stock on the employee's entry date into the two-year offering period in which that semi-annual purchase date occurs or (ii) the closing selling price per share on the semi-annual purchase date.
- (4) The calculation does not take into account the 862,850 shares of common stock subject to outstanding RSUs. Such shares will be issued at the time the RSUs vest, without any cash consideration payable for those shares.
- (5) Consists of shares available for future issuance under the Purchase Plan and the 2018 Plan. As of December 31, 2019, 2,757,600 shares of common stock were available for issuance under the Purchase Plan, and 6,691,209 shares of common stock were available for issuance under the 2018 Plan.
- (6) As of December 31, 2019, the maximum aggregate number of shares of common stock reserved for issuance under the 2018 Plan and the Purchase Plan was 12,347,215 shares and 4,600,000 shares, respectively. This maximum aggregate share reserve is not the same as the shares available for future issuance, which is described in Footnote 5. As of December 31, 2019, the aggregate number of shares of our common stock that may be issued under the 2018 Plan will not exceed the sum of (i) 1,703,964 shares (the number of shares that were available for grant under the 2013 Plan as of immediately prior to the effective date of the 2018 Plan); (ii) 8,800,000 shares (the number of additional shares that were reserved as of the effective date of the 2018 Plan); and (iii) any returning shares subject to outstanding awards granted under the Prior Plans as such shares become available from time to time due to expiration or termination of such awards, settlement of such awards in cash or forfeitures or repurchases. The number of shares of our common stock available for issuance under the 2018 Plan is increased by: (i) one share for each Prior Plans' returning share of common stock or 2018 Plan returning share of common stock subject to a stock option grant or stock appreciation right award and (ii) 1.33 shares for each Prior Plans' returning share of common stock or 2018 Plan returning share of common stock subject to a full value award. The number of shares of common stock reserved for issuance under the 2018 Plan is reduced: (i) on a 1-for-1 basis for each share of common stock subject to a stock option grant or stock appreciation right award, or pursuant to a full-value award made under the 2018 Plan, and (ii) by a fixed ratio of 1.33 shares of common stock for each share of common stock issued pursuant to a full-value award made under the 2018 Plan.

- (7) Consists of stock options granted as Inducement Awards under the 2013 Plan. As of December 31, 2019, no shares remained available for issuance as Inducement Awards under the 2013 Plan.
- (8) As of December 31, 2019, options to purchase 164,000 shares were outstanding as Inducement Awards. All options granted as Inducement Awards have a maximum term of 10 years. As a result of the adoption of the 2018 Plan at our 2018 annual meeting of stockholders, no additional stock awards may be granted as Inducement Awards. Accordingly, for purposes of the table above, no shares remained available for issuance as Inducement Awards as of December 31, 2019.

REPORT OF THE AUDIT COMMITTEE OF THE BOARD OF DIRECTORS¹

The information contained under the heading “Report of the Audit Committee of the Board of Directors” in this Proxy Statement shall not be deemed to be “soliciting material” or to be “filed” with the Securities and Exchange Commission, nor shall such information be incorporated by reference into any filing of the Company with the Securities and Exchange Commission, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing, or subject to the liabilities of Section 18 of the Exchange Act.

The Audit Committee has reviewed and discussed the audited financial statements for the fiscal year ended December 31, 2019 with the management of the Company.

The Audit Committee has discussed with Ernst & Young LLP, the independent registered public accounting firm that audited our financial statements for the fiscal year ended December 31, 2019, the matters required to be discussed by the applicable requirements of the Public Company Accounting Oversight Board (PCAOB) and the Securities and Exchange Commission.

The Audit Committee has received the written disclosures and the letter from Ernst & Young LLP required by applicable requirements of the PCAOB regarding Ernst & Young LLP’s communications with the Audit Committee concerning independence, and has discussed with Ernst & Young LLP its independence from the Company.

Based on the review of the audited financial statements and the discussions noted above, the Audit Committee recommended to our Board of Directors that the audited financial statements be included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2019 for filing with the Securities and Exchange Commission.

Submitted by the Audit Committee of the
Board of Directors of Sangamo Therapeutics, Inc.

Mr. Robert F. Carey
Dr. Stephen G. Dilly
Ms. Saira Ramasastry

¹ The material in this Report of the Audit Committee is not “soliciting material,” is not deemed “filed” with the SEC and is not to be incorporated by reference into any filing of Sangamo Therapeutics, Inc. under the Securities Act or the Exchange Act, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

Policy and Procedures for Review of Related Party Transactions

Consistent with the requirement under Nasdaq listing rules, the Audit Committee of the Board of Directors is responsible for reviewing and providing oversight of all related party transactions as defined under SEC rules and regulations. While we do not have a formal written policy or procedure for the review, approval or ratification of related party transactions, the charter of the Audit Committee requires that the Audit Committee approve all related party transactions as defined under SEC rules and regulations. In making its decision to approve or ratify a related party transaction, the Audit Committee will consider the relevant facts and circumstances available and deemed relevant to the Audit Committee, including but not limited to the risks, costs and benefits to us, the terms and aggregate value of the transaction, the availability of other sources for comparable services or products, and, if applicable, the impact on a director's independence.

Transactions with Related Persons; Indemnification

Transactions with Related Persons. Since January 1, 2019, there has not been nor is there currently proposed any transaction or series of similar transactions to which we were or are to be a party in which the amount involved exceeds \$120,000 and in which any director, executive officer, holder of more than 5% of our common stock, or any member of the immediate family of any of the foregoing persons, had or will have a direct or indirect material interest other than described below and other than compensation agreements and other arrangements, which are described elsewhere in this Proxy Statement.

In October 2018, we acquired Sangamo France and as part of that acquisition, we entered into liquidity agreements with certain holders of "free shares" of Sangamo France, including Mr. Boissel, one of our executive officers, with respect to 238,100 of such free shares. Under the liquidity agreement with Mr. Boissel, we have the right to purchase such free shares from Mr. Boissel and Mr. Boissel has the right to sell to us such free shares from time to time through February 2021 for a purchase price per free share as set forth in the liquidity agreement. Since January 1, 2019, we have acquired 52,700 vested free shares from Mr. Boissel upon the exercise of his free share put right in exchange for a cash payment from us of €111,724, or approximately \$124,000. Neither the entry into of the liquidity agreement with Mr. Boissel nor the exercise of his put right were approved as a related party transaction by our Audit Committee, as Mr. Boissel was not a related person at the time the liquidity agreement was entered into. However, our Audit Committee has reviewed and provided oversight of, and will continue to appropriately review and oversee, free share purchases from Mr. Boissel under his liquidity agreement consistent with applicable Nasdaq rules.

Indemnification. In addition to the indemnification provisions contained in the Restated Certificate, we have entered into separate indemnification agreements with each of our directors and executive officers containing provisions that may require us to, among other things, indemnify them against certain liabilities that may arise by reason of their status or service as directors and executive officers. We may amend these indemnification agreements from time-to-time as appropriate.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Proxy Statement contains forward-looking statements regarding our current expectations. These forward-looking statements include, without limitation, statements regarding: our business strategy and the therapeutic potential of our product candidates; the closing of our global collaboration agreement and stock purchase agreement with Biogen, including statements related to the timing and expected benefits thereof; the advancement of SB-525 into a Phase 3 registrational study by Pfizer; our expectations and plans with respect to clinical trial initiations and enrollment, and the timing thereof; and other statements that are not historical fact. In some cases, you can identify forward-looking statements by terms such as: "will," "intend," "anticipate," "believe," "continue," "could," "estimate," "expect," "may," "plan," "seek," and "should." These statements are not guarantees of future performance and are subject to certain risks, uncertainties and assumptions that are difficult to predict. Factors that could cause actual results to differ include, but are not limited to, risks and uncertainties related to: our dependence on the success of clinical trials; the lengthy and uncertain regulatory approval process; the initiation, enrollment and completion of clinical trials; whether the final results from a study will validate and support interim safety and efficacy data; our reliance on partners and other third-parties to meet their clinical and manufacturing obligations; our ability to maintain strategic partnerships and collaborations; the potential for technological developments by our competitors that will obviate our technologies; and the impact of public health epidemics, such as COVID-19, on employees, our ability to carry out research and clinical trials, our supply chain, and the global economy. Further, there can be no assurance that (i) our global collaboration agreement with Biogen will become effective and that the transactions contemplated thereby or by the stock purchase agreement with Biogen will otherwise close, including as a result of the failure by the parties to clear the Hart-Scott-Rodino Antitrust Improvements Act of 1976 in the United States review or otherwise satisfy closing conditions, (ii) any additional milestone events will be achieved related to any of our partnered product candidates or (iii) the necessary regulatory approvals will be obtained or that we and our partners will be able to develop commercially viable product candidates. Actual results may differ from those projected in forward-looking statements due to risks and uncertainties that exist in our operations and business environments. These risks and uncertainties are described more fully

in the 2019 Form 10-K as filed with the SEC. Forward-looking statements contained in this Proxy Statement are made as of the date of this Proxy Statement, and we undertake no duty to update such information except as required under applicable law.

HOUSEHOLDING OF PROXY MATERIALS

The SEC has adopted rules that permit companies and intermediaries (such as brokers) to satisfy the delivery requirements for Notices and proxy materials with respect to two or more stockholders sharing the same address by delivering a single Notice or a single set of proxy materials, as applicable, addressed to those stockholders. This process, which is commonly referred to as “householding,” potentially means extra convenience for stockholders and cost savings for companies.

This year, a number of brokers with account holders who are our stockholders will be “householding” Notices and our proxy materials. A single Notice or a single set of proxy materials, as applicable, will be delivered to multiple stockholders sharing an address unless contrary instructions have been received from the affected stockholders. Once you have received notice from your broker that it will be “householding” communications to your address, “householding” will continue until you are notified otherwise or until you revoke your consent. If, at any time, you no longer wish to participate in “householding” and would prefer to receive a separate Notice or set of proxy materials, please notify your broker or us. Direct your written request to Sangamo Therapeutics, Inc., Gary H. Loeb, Secretary, 7000 Marina Boulevard, Brisbane, California 94005 or contact McDavid Stilwell at 510-970-6000. Stockholders who currently receive multiple copies of the Notice or sets of proxy materials at their address and would like to request “householding” of their communications should contact their broker. In addition, we will promptly deliver, upon written or oral request to the address or telephone number above, a separate copy of a Notice or the full set of proxy materials, as applicable, to a stockholder at a shared address to which a single Notice or set of the proxy materials, as applicable, was delivered.

OTHER MATTERS

The Board of Directors knows of no other business that will be presented to the Annual Meeting. If any other business is properly brought before the Annual Meeting, or with respect to any adjournment or postponement thereof, it is the intention of the proxy holders to vote on such matters in accordance with their best judgment.

It is important that your shares are represented at the Annual Meeting. We urge you to vote your shares via the Internet, over the telephone or, if you received a paper proxy card or voting instruction form by mail, by marking, dating and signing the proxy card or voting instruction form and mailing it promptly in the return envelope provided.

By Order of the Board of Directors,

Gary H. Loeb
Corporate Secretary

Brisbane, California

April , 2020

Our Annual Report on Form 10-K for the year ended December 31, 2019 is available without charge upon written request to: Corporate Secretary, Sangamo Therapeutics, Inc., 7000 Marina Boulevard, Brisbane, California 94005. Our Annual Report on Form 10-K is not incorporated into this Proxy Statement and is not considered proxy soliciting material.

**Sangamo Therapeutics, Inc.
2018 Equity Incentive Plan**

Adopted by the Compensation Committee of the Board: April 23, 2018
Approved by the Stockholders: June 11, 2018
Amended and Restated by the Compensation Committee of the Board: March 20, 2020
Approved by the Stockholders:

Table of Contents

1. General	1
2. Shares Subject to the Plan	1
3. Eligibility	3
4. Options and Stock Appreciation Rights	3
6. Awards Other Than Options and Stock Appreciation Rights	7
7. Adjustments upon Changes in Common Stock; Other Corporate Events	8
8. Automatic Grants To Eligible Directors	11
9. Administration	12
10. Tax Withholding	15
11. Miscellaneous	15
12. Covenants of the Company	20
13. Additional Rules for Awards Subject to Section 409A	21
14. Severability	24
14. Termination of the Plan	24
15. Definitions	25

1. General.

(a) **Successor to and Continuation of Predecessor Plan.** The Plan is the successor to and continuation of the Predecessor Plan. As of the Effective Date, (i) no additional awards may be granted under the Predecessor Plan; (ii) the Predecessor Plan's Available Reserve will become available for issuance pursuant to Awards granted under this Plan; and (iii) all outstanding awards granted under the Prior Plans will remain subject to the terms of the Prior Plans; *provided, however*, that any Prior Plans' Returning Shares will become available for issuance pursuant to Awards granted under this Plan. All Awards granted under this Plan will be subject to the terms of this Plan.

(b) **Eligible Award Recipients and Plan Purpose.** Subject to the terms of the Plan, Employees, Directors and Consultants are eligible to receive Awards. Only Eligible Directors will receive Awards under the Automatic Grant Program. The Company, by means of the Plan, seeks to secure and retain the services of such persons, to provide incentives for such persons to exert maximum efforts for the success of the Company and any Affiliate and to provide a means by which such persons may be given an opportunity to benefit from increases in value of the Common Stock through the granting of Awards.

(c) **Available Awards.** The Plan provides for the grant of the following Awards: (i) Incentive Stock Options; (ii) Nonstatutory Stock Options; (iii) SARs; (iv) Restricted Stock Awards; (v) RSU Awards; (vi) Performance Awards; and (vii) Other Awards.

(d) **Effective Date.** The Plan will come into existence on the Effective Date. No Award may be granted under the Plan prior to the Effective Date.

2. Shares Subject to the Plan.

(a) **Share Reserve.**

(i) Subject to the adjustments in this Section 2 and in Section 6(a), the aggregate number of shares of Common Stock that may be issued pursuant to Awards will not exceed the sum of: (A) 8,800,000 shares (which were approved at the Annual Meeting in 2018); plus (B) 9,900,000 shares (which were approved at the Annual Meeting in 2020); plus (C) the number of Prior Plans' Returning Shares, if any, as such shares become available from time to time; plus (D) 1,703,964 shares (which is the Predecessor Plan's Available Reserve).

(ii) The number of shares of Common Stock available for issuance under the Plan will be reduced by: (A) one share for each share of Common Stock issued pursuant to an Appreciation Award granted under the Plan and (B) 1.33 shares for each share of Common Stock issued pursuant to a Full Value Award granted under the Plan.

(iii) The number of shares of Common Stock available for issuance under the Plan will be increased by: (A) one share for each Prior Plans' Returning Share or 2018 Plan Returning Share (as defined in Section 2(d)(i)) subject to an Appreciation Award and (B) 1.33 shares for each Prior Plans' Returning Share or 2018 Plan Returning Share (as defined in Section 2(d)(i)) subject to a Full Value Award.

(b) **Incentive Stock Option Limit.** Notwithstanding anything to the contrary in Section 2(a) and subject to Section 6(a) regarding Capitalization Adjustments, the aggregate maximum number of shares of Common Stock that may be issued pursuant to the exercise of Incentive Stock Options is 37,400,000 shares.

(c) **Actions that Will Not Constitute Issuance of Shares and Will Not Reduce Share Reserve.** The following actions will not result in an issuance of shares of Common Stock under the Plan and accordingly will not reduce the number of shares of Common Stock subject to the Share Reserve and available for issuance under the Plan: (i) the expiration or termination of any portion of an Award without the shares covered by such portion of the Award having been issued; or (ii) the settlement of any portion of an Award in cash (i.e., the Participant receives cash rather than shares of Common Stock).

(d) **Reversion of Shares to the Share Reserve.**

(i) **Shares Available For Subsequent Issuance.** If any shares of Common Stock issued pursuant to an Award are forfeited back to or repurchased by the Company because of the failure to meet a contingency or condition required for the vesting of such shares, then such shares will revert to the Share Reserve and become available again for issuance under the Plan and, for purposes of the Plan, such shares will be the "**2018 Plan Returning Shares**".

(ii) **Shares Not Available For Subsequent Issuance.** The following shares of Common Stock will not become available again for issuance under the Plan: (A) any shares that are reacquired or withheld (or not issued) by the Company to satisfy the exercise or purchase price of an Appreciation Award or a Full Value Award (including any shares subject to such award that are not delivered because such award is exercised through a reduction of shares subject to such award (i.e., "net exercised")); (B) any shares that are reacquired or withheld (or not issued) by the Company to satisfy a tax withholding obligation in connection with an Appreciation Award or a Full Value Award; (C) any shares repurchased by the Company on the open market with the proceeds of the exercise or purchase price of an Appreciation Award or a Full Value Award; and (D) in the event that a Stock Appreciation Right granted under the Plan or a stock appreciation right granted under any of the Prior Plans is settled in shares of Common Stock, the gross number of shares of Common Stock subject to such award.

(e) **Share Reserve Limit.** For clarity, the Share Reserve limit in Section 2(a) is a limit on the number of shares of Common Stock that may be issued pursuant to Awards and does not limit the granting of Awards, except that the Company will keep available at all times the number of shares of Common Stock reasonably required to satisfy its obligations to issue shares pursuant to such Awards. Shares may be issued in connection with a merger or acquisition as permitted by, as applicable, Nasdaq Listing Rule 5635(c), NYSE Listed Company Manual Section 303A.08, AMEX Company Guide Section 711 or other applicable rule, and such issuance will not reduce the number of shares available for issuance under the Plan.

3. **Eligibility.**

(a) **Eligibility for Specific Awards.** Incentive Stock Options may be granted only to Employees of the Company or a "parent corporation" or "subsidiary corporation" thereof (as such terms are defined in Sections 424(e) and (f) of the Code). Awards other than Incentive Stock Options may be granted to Employees, Directors and Consultants; *provided, however*, that Nonstatutory Stock Options and SARs may not be granted to Employees, Directors and Consultants who are providing Continuous Service only to any "parent" of the Company (as such term is defined in Rule 405) unless the stock underlying such Awards is treated as "service recipient stock" under Section 409A because the Awards are granted pursuant to a corporate transaction (such as a spin off transaction) or unless such Awards otherwise comply with the distribution requirements of Section 409A.

(b) **Ten Percent Stockholders.** A Ten Percent Stockholder may not be granted an Incentive Stock Option unless (i) the exercise price of such Option is at least 110% of the Fair Market Value on the date of grant of such Option and (ii) the Option is not exercisable after the expiration of five years from the date of grant of such Option.

4. **Options and Stock Appreciation Rights.**

Each Option and SAR will have such terms and conditions as determined by the Board. Each Option will be designated in writing as an Incentive Stock Option or Nonstatutory Stock Option at the time of grant; *provided, however*, that if an Option is not so designated, then such Option will be a Nonstatutory Stock Option, and the shares purchased upon exercise of each type of Option will be separately accounted for. The terms and conditions of separate Options and SARs need not be identical; *provided, however*, that each Option Agreement and SAR Agreement will conform (through incorporation of provisions hereof by reference in the Award Agreement or otherwise) to the substance of each of the following provisions:

(a) **Term.** Subject to Section 3(b) regarding Ten Percent Stockholders, no Option or SAR will be exercisable after the expiration of ten years from the date of grant of such Award or such shorter period specified in the Award Agreement.

(b) **Exercise or Strike Price.** Subject to Section 3(b) regarding Ten Percent Stockholders, the exercise or strike price of each Option or SAR will not be less than 100% of the Fair Market Value on the date of grant of such Award. Notwithstanding the foregoing, an Option or SAR may be granted with an exercise or strike price lower than 100% of the Fair Market Value on the date of grant of such Award if such Award is granted pursuant to an assumption of or substitution for another option or stock appreciation right pursuant to a Change in Control and in a manner consistent with the provisions of Sections 409A and, if applicable, 424(a) of the Code. Each SAR will be denominated in shares of Common Stock equivalents.

(c) **Exercise Procedure and Payment of Exercise Price for Options.** In order to exercise an Option, the Participant must provide notice of exercise to the Plan Administrator in accordance with the procedures specified in the Option Agreement. The Board has the authority to grant Options that do not permit all of the following methods of payment (or otherwise restrict the ability to use certain methods) and to grant Options that require the consent of the Company to utilize a particular method of payment. The exercise price of an Option may be paid, to the extent permitted by Applicable Law and as determined by the Board, by one or more of the following methods of payment to the extent set forth in the Option Agreement:

(i) by cash or check, bank draft or money order payable to the Company;

(ii) pursuant to a “cashless exercise” program developed under Regulation T as promulgated by the Federal Reserve Board that, prior to the issuance of the Common Stock subject to the Option, results in either the receipt of cash (or check) by the Company or the receipt of irrevocable instructions to pay the exercise price to the Company from the sales proceeds;

(iii) by delivery to the Company (either by actual delivery or attestation) of shares of Common Stock that are already owned by the Participant free and clear of any liens, claims, encumbrances or security interests, with a Fair Market Value on the date of exercise that does not exceed the exercise price, provided that (A) at the time of exercise the Common Stock is publicly traded, (B) any remaining balance of the exercise price not satisfied by such delivery is paid by the Participant in cash or other permitted form of payment, (C) such delivery would not violate any Applicable Law or agreement restricting the redemption of the Common Stock, (D) any certificated shares are endorsed or accompanied by an executed assignment separate from certificate, and (E) such shares have been held by the Participant for any minimum period necessary to avoid adverse accounting treatment as a result of such delivery;

(iv) if the Option is a Nonstatutory Stock Option, by a “net exercise” arrangement pursuant to which the Company will reduce the number of shares of Common Stock issuable upon exercise by the largest whole number of shares with a Fair Market Value on the date of exercise that does not exceed the exercise price, provided that (A) any remaining balance of the exercise price not satisfied by such net exercise is paid by the Participant in cash or other permitted form of payment, and (B) shares of Common Stock will no longer be subject to such Option and will not be exercisable thereafter to the extent that shares issuable upon exercise are reduced to pay the exercise price pursuant to such “net exercise;” or

(v) in any other form of consideration that may be acceptable to the Board and permissible under Applicable Law.

(d) **Exercise Procedure and Payment of Appreciation Distribution for SARs.** In order to exercise any SAR, the Participant must provide notice of exercise to the Plan Administrator in accordance with the SAR Agreement. The appreciation distribution payable to a Participant upon the exercise of a SAR will not be greater than an amount equal to the excess of (i) the aggregate Fair Market Value on the date of exercise of a number of shares of Common Stock equal to the number of Common Stock equivalents that are vested and being exercised under such SAR, over (ii) the strike price of such SAR. Such appreciation distribution may be paid to the Participant in the form of Common Stock or cash (or any combination of Common Stock and cash) or in any other form of payment, as determined by the Board and specified in the SAR Agreement.

(e) **Transferability.** Options and SARs may not be transferred to third party financial institutions for value. The Board may impose such additional limitations on the transferability of an Option or SAR. In the absence of any such determination, the following restrictions on the transferability of Options and SARs will apply, provided that except as explicitly provided herein, neither an Option nor a SAR may be transferred for consideration and *provided, further*, that if an Option is an Incentive Stock Option, such Option may be deemed to be a Nonstatutory Stock Option as a result of such transfer:

(i) **Restrictions on Transfer.** An Option or SAR will not be transferable, except by will or by the laws of descent and distribution, and will be exercisable during the lifetime of the Participant only by the Participant; *provided, however*, that the Board may permit transfer of an Option or SAR in a manner that is not prohibited by applicable tax and securities laws upon the Participant’s request, including to a trust if the Participant is considered to be the sole beneficial owner of such trust (as determined under Section 671 of the Code and applicable state law) while such Option or SAR is held in such trust, provided that the Participant and the trustee enter into a transfer and other agreements required by the Company.

(ii) **Domestic Relations Orders.** Notwithstanding the foregoing, subject to the execution of transfer documentation in a format acceptable to the Company, an Option or SAR may be transferred pursuant to a domestic relations order.

(f) **Vesting.** Subject to Section 10(a), the Board may impose such restrictions on or conditions to the vesting and/or exercisability of an Option or SAR as determined by the Board and which may vary. Except as otherwise provided in the Award Agreement or other written agreement between a Participant and the Company or an Affiliate, vesting of Options and SARs will cease upon termination of the Participant's Continuous Service.

(g) **Termination of Continuous Service.** Subject to Section 4(h), if a Participant's Continuous Service terminates for any reason other than for Cause, the Participant may exercise his or her Option or SAR to the extent vested, but only within the following period of time or, if applicable, such other period of time provided in the Award Agreement or other written agreement between a Participant and the Company or an Affiliate; *provided, however*, that in no event may such Award be exercised after the expiration of its maximum term (as set forth in Section 4(a)):

(i) three months following the date of such termination if such termination is a termination without Cause (other than any termination due to the Participant's Disability or death);

(ii) 12 months following the date of such termination if such termination is due to the Participant's Disability;

(iii) 18 months following the date of such termination if such termination is due to the Participant's death; or

(iv) 18 months following the date of the Participant's death if such death occurs following the date of such termination but during the period such Award is otherwise exercisable (as provided in (i) or (ii) above).

Following the date of such termination, to the extent the Participant does not exercise such Award within the applicable Post-Termination Exercise Period (or, if earlier, prior to the expiration of the maximum term of such Award), such unexercised portion of the Award will terminate, and the Participant will have no further right, title or interest in the terminated Award, the shares of Common Stock subject to the terminated Award, or any consideration in respect of the terminated Award.

(h) **Extension of Exercisability.** Except as otherwise provided in the Award Agreement or other written agreement between a Participant and the Company or an Affiliate, if a Participant's Continuous Service terminates for any reason other than for Cause and, at any time during the last thirty days of the applicable Post-Termination Exercise Period: (i) the exercise of the Participant's Option or SAR would be prohibited solely because the issuance of shares of Common Stock upon such exercise would violate Applicable Law, or (ii) the immediate sale of any shares of Common Stock issued upon such exercise would violate the Company's Trading Policy, then the applicable Post-Termination Exercise Period will be extended to the last day of the calendar month that commences following the date the Award would otherwise expire, with an additional extension of the exercise period to the last day of the next calendar month to apply if any of the foregoing restrictions apply at any time during such extended exercise period, generally without limitation as to the maximum permitted number of extensions; *provided, however*, that in no event may such Award be exercised after the expiration of its maximum term (as set forth in Section 4(a)).

(i) **Termination of Continuous Service for Cause.** Except as explicitly otherwise provided in the Award Agreement or other written agreement between a Participant and the Company or an Affiliate, if a Participant's Continuous Service is terminated for Cause, the Participant's Options and SARs will terminate and be forfeited immediately upon such termination of Continuous Service, and the Participant will be prohibited from exercising any portion (including any vested portion) of such Awards on and after the date of such termination of Continuous Service and the Participant will have no further right, title or interest in such forfeited Award, the shares of Common Stock subject to the forfeited Award, or any consideration in respect of the forfeited Award.

(j) **Non-Exempt Employees.** No Option or SAR, whether or not vested, granted to an Employee who is a non-exempt employee for purposes of the Fair Labor Standards Act of 1938, as amended, will be first exercisable for any shares of Common Stock until at least six months following the date of grant of such Award. Notwithstanding the foregoing, in accordance with the provisions of the Worker Economic Opportunity Act, any vested portion of such Award may be exercised earlier than six months following the date of grant of such Award in the event of (i) such Participant's death or Disability, (ii) a Change in Control in which such Award is not assumed, continued or substituted, or (iii) such Participant's retirement (as such term may be defined in the Award Agreement or another applicable agreement or, in the absence of any such definition, in accordance with the Company's then current employment policies and guidelines). This Section 4(j) is intended to operate so that any income derived by a non-exempt employee in connection with the exercise or vesting of an Option or SAR will be exempt from his or her regular rate of pay.

(k) **Whole Shares.** Options and SARs may be exercised only with respect to whole shares of Common Stock or their equivalents.

5. **Awards Other Than Options and Stock Appreciation Rights.**

(a) **Restricted Stock Awards and RSU Awards.** Each Restricted Stock Award and RSU Award will have such terms and conditions as determined by the Board. The terms and conditions of separate Restricted Stock Awards and RSU Awards need not be identical; *provided, however*, that each Restricted Stock Award Agreement and RSU Award Agreement will conform (through incorporation of the provisions hereof by reference in the Award Agreement or otherwise) to the substance of each of the following provisions:

(i) **Form of Award.**

(1) To the extent consistent with the Company's Bylaws, at the Board's election, shares of Common Stock subject to a Restricted Stock Award may be (i) held in book entry form subject to the Company's instructions until such shares become vested or any other restrictions lapse, or (ii) evidenced by a certificate, which certificate will be held in such form and manner as determined by the Board. Unless otherwise determined by the Board, a Participant will have voting and other rights as a stockholder of the Company with respect to any shares subject to a Restricted Stock Award.

(2) A RSU Award represents a Participant's right to be issued on a future date the number of shares of Common Stock that is equal to the number of restricted stock units subject to the RSU Award. As a holder of a RSU Award, a Participant is an unsecured creditor of the Company with respect to the Company's unfunded obligation, if any, to issue shares of Common Stock in settlement of such Award and nothing contained in the Plan or any RSU Award Agreement, and no action taken pursuant to its provisions, will create or be construed to create a trust of any kind or a fiduciary relationship between a Participant and the Company or an Affiliate or any other person. A Participant will not have voting or any other rights as a stockholder of the Company with respect to any RSU Award (unless and until shares are actually issued in settlement of a vested RSU Award).

(ii) **Consideration.**

(1) A Restricted Stock Award may be granted in consideration for (A) cash or check, bank draft or money order payable to the Company, (B) past services to the Company or an Affiliate, or (C) any other form of consideration (including future services) as the Board may determine and permissible under Applicable Law.

(2) Unless otherwise determined by the Board at the time of grant, a RSU Award will be granted in consideration for the Participant's services to the Company or an Affiliate, such that the Participant will not be required to make any payment to the Company (other than such services) with respect to the grant or vesting of the RSU Award, or the issuance of any shares of Common Stock pursuant to the RSU Award. If, at the time of grant, the Board determines that any consideration must be paid by the Participant (in a form other than the Participant's services to the Company or an Affiliate) upon the issuance of any shares of Common Stock in settlement of the RSU Award, such consideration may be paid in any form of consideration as the Board may determine and permissible under Applicable Law.

(iii) **Vesting.** Subject to Section 10(a), the Board may impose such restrictions on or conditions to the vesting of a Restricted Stock Award or RSU Award as determined by the Board and which may vary. Except as otherwise provided in the Award Agreement or other written agreement between a Participant and the Company or an Affiliate, vesting of Restricted Stock Awards and RSU Awards will cease upon termination of the Participant's Continuous Service.

(iv) **Termination of Continuous Service.** Except as otherwise provided in the Award Agreement or other written agreement between a Participant and the Company or an Affiliate, if a Participant's Continuous Service terminates for any reason, (i) the Company may receive through a forfeiture condition or a repurchase right any or all of the shares of Common Stock held by the Participant under his or her Restricted Stock Award that have not vested as of the date of such termination as set forth in the Restricted Stock Award Agreement and (ii) any portion of his or her RSU Award that has not vested will be forfeited upon such termination and the Participant will have no further right, title or interest in the RSU Award, the shares of Common Stock issuable pursuant to the RSU Award, or any consideration in respect of the RSU Award.

(v) **Settlement of RSU Awards.** A RSU Award may be settled by the issuance of shares of Common Stock or cash (or any combination thereof) or in any other form of payment, as determined by the Board and specified in the RSU Award Agreement. At the time of grant, the Board may determine to impose such restrictions or conditions that delay such delivery to a date following the vesting of the RSU Award.

(b) **Performance Awards.** With respect to any Performance Award, the length of any Performance Period, the Performance Goals to be achieved during the Performance Period, the other terms and conditions of such Award, and the measure of whether and to what degree such Performance Goals have been attained will be determined by the Board. In addition, to the extent permitted by Applicable Law and set forth in the applicable Award Agreement, the Board may determine that cash may be used in payment of Performance Awards.

(c) **Other Awards.** Other forms of Awards valued in whole or in part by reference to, or otherwise based on, Common Stock may be granted either alone or in addition to Awards provided for under Section 4 and the preceding provisions of this Section 5. Subject to the provisions of the Plan, the Board will have sole and complete discretion to determine the persons

to whom and the time or times at which such Other Awards will be granted, the number of shares of Common Stock (or the cash equivalent thereof) to be granted pursuant to such Other Awards and all other terms and conditions of such Other Awards.

6. **Adjustments upon Changes in Common Stock; Other Corporate Events.**

(a) **Capitalization Adjustments.** In the event of a Capitalization Adjustment, the Board shall appropriately and proportionately adjust: (i) the class(es) and maximum number of securities subject to the Plan pursuant to Section 2(a), (ii) the class(es) and maximum number of securities that may be issued pursuant to the exercise of Incentive Stock Options pursuant to Section 2(b), (iii) the class(es) and number of securities to be granted pursuant to the Automatic Grant Program, and (iv) the class(es) and number of securities and exercise price, strike price or purchase price of stock subject to outstanding Awards. The Board shall make such adjustments, and its determination shall be final, binding and conclusive. Notwithstanding the provisions of this Section 6(a), no fractional shares or rights for fractional shares of Common Stock shall be created pursuant to this Section 6(a). The Board shall determine an equivalent benefit for any fractional shares or fractional shares that might be created by the adjustments referred to in this Section 6(a).

(b) **Dissolution or Liquidation.** Except as otherwise provided in the Award Agreement, in the event of a dissolution or liquidation of the Company, all outstanding Awards (other than Awards consisting of vested and outstanding shares of Common Stock not subject to a forfeiture condition or the Company's right of repurchase) will terminate immediately prior to the completion of such dissolution or liquidation, and the shares of Common Stock subject to the Company's repurchase rights or subject to a forfeiture condition may be repurchased or reacquired by the Company notwithstanding the fact that the holder of such Award is providing Continuous Service, *provided, however*, that the Board may determine to cause some or all Awards to become fully vested, exercisable and/or no longer subject to repurchase or forfeiture (to the extent such Awards have not previously expired or terminated) before the dissolution or liquidation is completed but contingent on its completion.

(c) **Change in Control.** The following provisions will apply to Awards in the event of a Change in Control unless otherwise provided in the instrument evidencing the Award or any other written agreement between the Company or any Affiliate and the Participant or unless otherwise expressly provided by the Board at the time of grant of the Award.

(i) **Awards May Be Assumed.** In the event of a Change in Control, any surviving corporation or acquiring corporation (or the surviving or acquiring corporation's parent company) may assume or continue any or all Awards outstanding under the Plan or may substitute similar stock awards for Awards outstanding under the Plan (including but not limited to, awards to acquire the same consideration paid to the stockholders of the Company pursuant to the Change in Control), and any reacquisition or repurchase rights held by the Company in respect of Common Stock issued pursuant to Awards may be assigned by the Company to the successor of the Company (or the successor's parent company, if any), in connection with such Change in Control. A surviving corporation or acquiring corporation (or its parent) may choose to assume or continue only a portion of an Award or substitute a similar stock award for only a portion of a Award, or may choose to assume or continue the Awards held by some, but not all Participants. The terms of any assumption, continuation or substitution will be set by the Board.

(ii) **Awards Held by Current Eligible Participants.** In the event of a Change in Control in which the surviving corporation or acquiring corporation (or its parent company) does not assume or continue such outstanding Awards or substitute similar awards for such outstanding Awards, then with respect to Awards that have not been assumed, continued or substituted and that are held by Participants who are Employees or Directors and whose Continuous Service has not terminated prior to the effective time of the Change in Control (referred to as the "**Current Eligible Participants**"), the vesting of such Awards (and, with respect to Options and Stock Appreciation Rights, the time when such Awards may be exercised) will be accelerated in full to a date prior to the effective time of such Change in Control (contingent upon the effectiveness of the Change in Control) as the Board determines (or, if the Board does not determine such a date, to the date that is five (5) days prior to the effective time of the Change in Control), and such Awards will terminate if not exercised (if applicable) at or prior to the effective time of the Change in Control, and any reacquisition or repurchase rights held by the Company with respect to such Awards will lapse (contingent upon the effectiveness of the Change in Control).

(iii) **Awards Held by Persons other than Current Eligible Participants.** In the event of a Change in Control in which the surviving corporation or acquiring corporation (or its parent company) does not assume or continue such outstanding Awards or substitute similar stock awards for such outstanding Awards, then with respect to Awards that have not been assumed, continued or substituted and that are held by persons other than Current Eligible Participants, such Awards will terminate if not exercised (if applicable) prior to the effective time of the Change in Control; *provided, however*, that any reacquisition or repurchase rights held by the Company with respect to such Awards will not terminate and may continue to be exercised notwithstanding the Change in Control.

(iv) **Payment for Awards in Lieu of Exercise.** Notwithstanding the foregoing, in the event a Award will terminate if not exercised prior to the effective time of a Change in Control, the Board may provide, in its sole discretion, that the holder of such Award may not exercise such Award but will receive a payment, in such form as may be determined by the Board, equal in value, at the effective time, to the excess, if any, of (A) the value of the property the Participant would have received upon

the exercise of the Award (including, at the discretion of the Board, any unvested portion of such Award), over (B) any exercise price payable by such holder in connection with such exercise.

(d) **Appointment of Stockholder Representative.** As a condition to the receipt of an Award under this Plan, a Participant will be deemed to have agreed that the Award will be subject to the terms of any agreement governing a Change in Control involving the Company, including, without limitation, a provision for the appointment of a stockholder representative that is authorized to act on the Participant's behalf with respect to any escrow, indemnities and any contingent consideration.

(e) **No Restriction on Right to Undertake Transactions.** The grant of any Award under the Plan and the issuance of shares pursuant to any Award does not affect or restrict in any way the right or power of the Company or the stockholders of the Company to make or authorize any adjustment, recapitalization, reorganization or other change in the Company's capital structure or its business, any merger or consolidation of the Company, any issue of stock or of options, rights or options to purchase stock or of bonds, debentures, preferred or prior preference stocks whose rights are superior to or affect the Common Stock or the rights thereof or which are convertible into or exchangeable for Common Stock, or the dissolution or liquidation of the Company, or any sale or transfer of all or any part of its assets or business, or any other corporate act or proceeding, whether of a similar character or otherwise.

7. **Automatic Grants To Eligible Directors.**

(a) **General.** The Automatic Grant Program set forth in this Section 7 provides that Eligible Directors shall automatically receive the grant of certain Awards at designated intervals over their period of Continuous Service on the Board. For the avoidance of doubt, Awards granted under this Automatic Grant Program are subject to all the terms and conditions of the Plan. Each Option granted under this Automatic Grant Program shall (i) be a Nonstatutory Stock Option, (ii) have an exercise price equal to one hundred percent (100%) of the Fair Market Value on the date the Option is granted, and (iii) have a maximum term of 10 years. For the avoidance of doubt, any shares of Common Stock issued pursuant to Awards granted under the Automatic Grant Program which may vest any earlier than 12 months following the date of grant will count against the 5% permitted exception to the minimum vesting requirements set forth in Section 10(a).

(b) **Initial Awards.** If an Eligible Director is first elected or appointed to serve on the Board on or after the Annual Meeting in 2020, such person shall, upon the date of his or her initial election or appointment as an Eligible Director, be granted an Option to purchase 30,000 shares of Common Stock and a RSU Award in respect of 15,000 shares of Common Stock (each such Option and RSU Award an "**Initial Award**"). Initial Awards of Options shall vest monthly with respect to 1/36th of the shares over the three year period following the date of grant, subject to the Eligible Director's Continuous Service through the applicable vesting dates, so that the Option will be fully vested on the third anniversary of the date of grant. Initial Awards of RSU Awards shall vest annually with respect to 1/3rd of the shares over the three year period following the date of grant, subject to the Eligible Director's Continuous Service through the applicable vesting dates, so that the RSU Award is fully vested on the third anniversary of the date of grant.

(c) **Annual Awards.** Each person who is an Eligible Director shall be granted an Option to purchase 20,000 shares of Common Stock and a RSU Award in respect of 10,000 shares of Common Stock (each such Option and RSU Award, an "**Annual Award**") on an annual basis as follows: (i) with respect to 2020, such Annual Awards shall be granted on the date of the Annual Meeting in 2020; and (ii) with respect to each year following 2020, such Annual Awards shall be granted on the 25th day of February of such year (or if such 25th day is not a trading day, the immediately preceding trading day in February); in each case, provided that such person is an Eligible Director on the date of grant, has served as an Eligible Director for a period of at least three months prior to the date of grant, and will continue serving as an Eligible Director immediately after the date of grant. Annual Awards of Options shall vest monthly with respect to 1/12th of the shares over the one (1) year period following the date of grant, subject to the Eligible Director's Continuous Service through the applicable vesting dates, so that the Option will be fully vested on the first anniversary of the date of grant. Annual Awards of RSU Awards granted in 2020 shall fully vest on the earlier of (i) the first anniversary of the date of grant or (ii) the day prior to the next Annual Meeting, subject to the Eligible Director's Continuous Service through such date. Annual Awards of RSU Awards granted in each year following 2020 shall fully vest on the first anniversary of the date of grant, subject to the Eligible Director's Continuous Service through such date.

(d) **Vesting Upon Change in Control or Hostile Take-Over.** Each Option and RSU Award granted pursuant to this Automatic Grant Program shall automatically fully accelerate vesting immediately prior to the effectiveness of a Change in Control or Hostile Take-Over, subject to the Eligible Director's Continuous Service through the date of the Change in Control or Hostile Take-Over, as applicable.

(e) **Vesting Upon Death or Disability.** If the Eligible Director's Continuous Service terminates due to death or Disability, such Eligible Director's Options and RSU Awards granted pursuant to this Automatic Grant Program shall automatically fully vest.

8. **Administration.**

(a) **Administration by Board.** The Board will administer the Plan unless and until the Board delegates administration of the Plan to a Committee or Committees, as provided in Section 8(d).

(b) **Powers of Board.** Except with respect to the Automatic Grant Program, the Board shall have the power, subject to, and within the limitations of, the express provisions of the Plan:

(i) To determine from time to time (A) which of the persons eligible under the Plan will be granted Awards; (B) when and how each Award will be granted; (C) what type or combination of types of Award will be granted; (D) the provisions of each Award granted (which need not be identical), including the time or times when a person will be permitted to receive cash or Common Stock pursuant to an Award; (E) the number of shares of Common Stock with respect to which an Award will be granted to each such person; and (F) the Fair Market Value applicable to an Award.

(ii) To construe and interpret the Plan and Awards granted under it, and to establish, amend and revoke rules and regulations for its administration. The Board, in the exercise of this power, may correct any defect, omission or inconsistency in the Plan or in any Award Agreement in a manner and to the extent it deems necessary or expedient to make the Plan or Award fully effective.

(iii) To settle all controversies regarding the Plan and Awards granted under it.

(iv) To accelerate the time at which an Award may first be exercised or the time during which an Award or any part thereof will vest, notwithstanding the provisions in the Award Agreement stating the time at which it may first be exercised or the time during which it will vest, including in connection with a Change in Control or Hostile Take-Over.

(v) To prohibit the exercise of any Option, SAR or other exercisable Award during a period of up to thirty days prior to the consummation of any pending stock dividend, stock split, combination or exchange of shares, merger, consolidation or other distribution (other than normal cash dividends) of Company assets to stockholders, or any other change affecting the shares of Common Stock or the share price of the Common Stock including any Change in Control, for reasons of administrative convenience.

(vi) To suspend or terminate the Plan at any time. Suspension or termination of the Plan will not impair rights and obligations under any Award granted while the Plan is in effect except with the written consent of the affected Participant.

(vii) To amend the Plan in any respect the Board deems necessary or advisable, provided that stockholder approval will be required to the extent required by Applicable Law. Except as provided above, rights under any Award granted before amendment of the Plan will not be impaired by any amendment of the Plan unless (1) the Company requests the consent of the affected Participant, and (2) such Participant consents in writing.

(viii) To submit any amendment to the Plan for stockholder approval.

(ix) To approve forms of Award Agreements for use under the Plan and to amend the terms of any one or more Awards, including, but not limited to, amendments to provide terms more favorable to the Participant than previously provided in the Award Agreement, subject to any specified limits in the Plan that are not subject to Board discretion; *provided, however*, that except with respect to amendments that disqualify or impair the status of an Incentive Stock Option, a Participant's rights under any Award will not be impaired by any such amendment unless (A) the Company requests the consent of the affected Participant, and (B) such Participant consents in writing. Notwithstanding the foregoing, (1) a Participant's rights will not be deemed to have been impaired by any such amendment if the Board, in its sole discretion, determines that the amendment, taken as a whole, does not materially impair the Participant's rights, including, but not limited, to, an amendment that imposes reasonable restrictions on the minimum number of shares subject to an Option that may be exercised, and (2) subject to the limitations of Applicable Law, if any, the Board may amend the terms of any one or more Awards without the affected Participant's consent (A) to maintain the qualified status of the Award as an Incentive Stock Option under Section 422 of the Code; (B) to change the terms of an Incentive Stock Option, if such change results in impairment of the Award solely because it impairs the qualified status of the Award as an Incentive Stock Option under Section 422 of the Code; (C) to clarify the manner of exemption from, or to bring the Award into compliance with or qualify it for an exemption from, Section 409A; or (D) to comply with other Applicable Laws.

(x) Generally, to exercise such powers and to perform such acts as the Board deems necessary or expedient to promote the best interests of the Company and that are not in conflict with the provisions of the Plan or Awards.

(xi) To adopt such procedures and sub-plans as are necessary or appropriate to permit participation in the Plan by Employees, Directors or Consultants who are foreign nationals or employed outside the United States.

(c) **Administration of Automatic Grant Program.** The Board shall have the power, subject to and within the limitations of, the express provisions of the Automatic Grant Program:

(i) To determine the provisions of each Award to the extent not specified in the Automatic Grant Program.

(ii) To construe and interpret the Automatic Grant Program and the Awards granted under it, and to establish, amend and revoke rules and regulations for its administration. The Board, in the exercise of this power, may correct any defect, omission or inconsistency in the Automatic Grant Program or in any Award Agreement, in a manner and to the extent it shall deem necessary or expedient to make the Automatic Grant Program fully effective.

(iii) To amend the terms of the Automatic Grant Program or an Award granted thereunder, except that rights under any such Award granted before amendment of the Automatic Grant Program shall not be impaired by any amendment of the Automatic Grant Program unless (1) the Company requests the consent of the affected Participant, and (2) such Participant consents in writing.

(iv) Generally, to exercise such powers and to perform such acts as the Board deems necessary or expedient to promote the best interests of the Company and that are not in conflict with the provisions of the Automatic Grant Program.

(d) **Delegation to Committee.**

(i) **General.** The Board may delegate some or all of the administration of the Plan (except the Automatic Grant Program) to a Committee or Committees. If administration of the Plan is delegated to a Committee, the Committee will have, in connection with the administration of the Plan, the powers theretofore possessed by the Board that have been delegated to the Committee, including the power to delegate to a subcommittee of the Committee any of the administrative powers the Committee is authorized to exercise (and references in this Plan to the Board will thereafter be to the Committee or subcommittee), subject, however, to such resolutions, not inconsistent with the provisions of the Plan, as may be adopted from time to time by the Board. The Committee may, at any time, abolish the subcommittee and/or revert in the Committee any powers delegated to the subcommittee. The Board may retain the authority to concurrently administer the Plan with the Committee and may, at any time, revert in the Board some or all of the powers previously delegated. As of the Effective Date the Board has delegated administration of the Plan to the Compensation Committee.

(ii) **Rule 16b-3 Compliance.** The Committee may consist solely of two or more Non-Employee Directors, in accordance with Rule 16b-3. In addition, the Board or the Committee, in its sole discretion, may delegate to a Committee who need not be Non-Employee Directors the authority to grant Awards to eligible persons who are not then subject to Section 16 of the Exchange Act.

(e) **Effect of Board's Decision.** All determinations, interpretations and constructions made by the Board or any Committee in good faith will not be subject to review by any person and will be final, binding and conclusive on all persons.

(f) **Cancellation and Re-Grant of Awards.** Neither the Board nor any Committee will have the authority to: (i) reduce the exercise price or strike price of any outstanding Options or SARs under the Plan, or (ii) cancel any outstanding Options or SARs that have an exercise price or strike price greater than the current Fair Market Value in exchange for cash or other Awards under the Plan, unless the stockholders of the Company have approved such an action within twelve months prior to such an event.

(g) **Delegation to an Officer.** The Board or any Committee may delegate to one or more Officers the authority to do one or both of the following (i) designate Employees who are not Officers to be recipients of Options and SARs (and, to the extent permitted by Applicable Law, other Awards) and, to the extent permitted by Applicable Law, the terms thereof, and (ii) determine the number of shares of Common Stock to be subject to such Awards granted to such Employees; *provided, however*, that the resolutions evidencing such delegation will specify the total number of shares of Common Stock that may be subject to the Awards granted by such Officer and that such Officer may not grant an Award to himself or herself. Any such Awards will be granted on the form of Award Agreement most recently approved for use by the Board or the Committee, unless otherwise provided in the resolutions approving the delegation authority. Notwithstanding anything to the contrary herein, neither the Board nor any Committee may delegate to an Officer who is acting solely in the capacity of an Officer (and not also as a Director) the authority to determine the Fair Market Value.

9. **Tax Withholding**

(a) **Withholding Authorization.** As a condition to acceptance of any Award under the Plan, a Participant authorizes withholding from payroll and any other amounts payable to such Participant, and otherwise agree to make adequate provision for (including), any sums required to satisfy the federal, state, local and foreign tax withholding obligations of the Company or an Affiliate, if any, which arise in connection with the exercise, vesting or settlement of such Award, as applicable. Accordingly, a Participant may not be able to exercise an Award even though the Award is vested, and the Company shall have no obligation to issue shares of Common Stock subject to an Award, unless and until such obligations are satisfied.

(b) **Satisfaction of Withholding Obligation.** To the extent permitted by the terms of an Award Agreement, the Company may, in its sole discretion, satisfy any federal, state, local or foreign tax withholding obligation relating to an Award by any of the following means or by a combination of such means: (i) causing the Participant to tender a cash payment; (ii) withholding shares of Common Stock from the shares of Common Stock issued or otherwise issuable to the Participant in connection with the

Award; (iii) withholding cash from an Award settled in cash; (iv) withholding payment from any amounts otherwise payable to the Participant; (v) by means of a “cashless exercise” pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board; or (vi) by such other method as may be set forth in the Award Agreement.

(c) **Withholding Indemnification.** As a condition to accepting an Award under the Plan, in the event that the amount of the Company’s withholding obligation in connection with such Award was greater than the amount actually withheld by the Company, each Participant agrees to indemnify and hold the Company harmless from any failure by the Company to withhold the proper amount.

10. **Miscellaneous.**

(a) **Minimum Vesting Requirements.** No Award may vest (or, if applicable, be exercisable) until at least twelve (12) months following the date of grant of the Award; *provided, however*, that shares of Common Stock up to five percent (5%) of the Share Reserve may be issued pursuant to Awards that do not meet such vesting (and, if applicable, exercisability) requirements.

(b) **Dividends and Dividend Equivalents.**

(i) Dividends or dividend equivalents may not be paid or credited to Options or SARs.

(ii) With respect to any Award other than an Option or SAR, dividends or dividend equivalents may be paid or credited, as applicable, with respect to any shares of Common Stock subject to such Award, as determined by the Board and specified in the applicable Award Agreement; *provided, however*, that (i) no dividends or dividend equivalents may be paid with respect to any such shares before the date such shares have vested under the terms of such Award Agreement, (ii) any dividends or dividend equivalents that are credited with respect to any such shares will be subject to all of the terms and conditions applicable to such shares under the terms of such Award Agreement (including, but not limited to, any vesting conditions), and (iii) any dividends or dividend equivalents that are credited with respect to any such shares will be forfeited to the Company on the date, if any, such shares are forfeited to or repurchased by the Company due to a failure to meet any vesting conditions under the terms of such Award Agreement.

(c) **Source of Shares.** The stock issuable under the Plan will be shares of authorized but unissued or reacquired Common Stock, including shares repurchased by the Company on the open market or otherwise.

(d) **Use of Proceeds from Sales of Common Stock.** Proceeds from the sale of shares of Common Stock pursuant to Awards will constitute general funds of the Company.

(e) **Corporate Action Constituting Grant of Awards.** Corporate action constituting a grant by the Company of an Award to any Participant will be deemed completed as of the date of such corporate action, unless otherwise determined by the Board, regardless of when the instrument, certificate, or letter evidencing the Award is communicated to, or actually received or accepted by, the Participant. In the event that the corporate records (e.g., Board consents, resolutions or minutes) documenting the corporate action approving the grant contain terms (e.g., exercise price, vesting schedule or number of shares) that are inconsistent with those in the Award Agreement or related grant documents as a result of a clerical error in the papering of the Award Agreement or related grant documents, the corporate records will control and the Participant will have no legally binding right to the incorrect term in the Award Agreement or related grant documents.

(f) **Stockholder Rights.** No Participant will be deemed to be the holder of, or to have any of the rights of a holder with respect to, any shares of Common Stock subject to such Award unless and until (i) such Participant has satisfied all requirements for exercise of the Award pursuant to its terms, if applicable, and (ii) the issuance of the Common Stock subject to such Award is reflected in the records of the Company.

(g) **No Employment or Other Service Rights.** Nothing in the Plan, any Award Agreement or any other instrument executed thereunder or in connection with any Award granted pursuant thereto will confer upon any Participant any right to continue to serve the Company or an Affiliate in the capacity in effect at the time the Award was granted or affect the right of the Company or an Affiliate to terminate at will and without regard to any future vesting opportunity that a Participant may have with respect to any Award (i) the employment of an Employee with or without notice and with or without cause, (ii) the service of a Consultant pursuant to the terms of such Consultant’s agreement with the Company or an Affiliate, or (iii) the service of a Director pursuant to the Bylaws of the Company or an Affiliate, and any applicable provisions of the corporate law of the state in which the Company or the Affiliate is incorporated, as the case may be. Further, nothing in the Plan, any Award Agreement or any other instrument executed thereunder or in connection with any Award will constitute any promise or commitment by the Company or an Affiliate regarding the fact or nature of future positions, future work assignments, future compensation or any other term or condition of employment or service or confer any right or benefit under the Award or the Plan unless such right or benefit has specifically accrued under the terms of the Award Agreement and/or Plan.

(h) **Change in Time Commitment.** In the event a Participant’s regular level of time commitment in the performance of his or her services for the Company and any Affiliates is reduced (for example, and without limitation, if the Participant is an Employee of the Company and the Employee has a change in status from a full-time Employee to a part-time Employee or takes

an extended leave of absence) after the date of grant of any Award to the Participant, the Board may determine, to the extent permitted by Applicable Law, to (x) make a corresponding reduction in the number of shares or cash amount subject to any portion of such Award that is scheduled to vest or become payable after the date of such change in time commitment, and (y) in lieu of or in combination with such a reduction, extend the vesting or payment schedule applicable to such Award. In the event of any such reduction, the Participant will have no right with respect to any portion of the Award that is so reduced or extended.

(i) **Incentive Stock Option \$100,000 Limitation.** To the extent that the aggregate Fair Market Value (determined at the time of grant) of Common Stock with respect to which Incentive Stock Options are exercisable for the first time by any Optionholder during any calendar year (under all plans of the Company and any Affiliates) exceeds \$100,000 (or such other limit established in the Code) or otherwise does not comply with the rules governing Incentive Stock Options, the Options or portions thereof that exceed such limit (according to the order in which they were granted) or otherwise do not comply with such rules will be treated as Nonstatutory Stock Options, notwithstanding any contrary provision of the applicable Option Agreement(s).

(j) **Execution of Additional Documents.** As a condition to accepting an Award under the Plan, the Participant agrees to execute any additional documents or instruments necessary or desirable, as determined in the Plan Administrator's sole discretion, to carry out the purposes or intent of the Award, or facilitate compliance with securities and/or other regulatory requirements, in each case at the Plan Administrator's request.

(k) **Electronic Delivery and Participation.** Any reference herein or in an Award Agreement to a "written" agreement or document will include any agreement or document delivered electronically, filed publicly at www.sec.gov (or any successor website thereto) or posted on the Company's intranet (or other shared electronic medium controlled by the Company to which the Participant has access). By accepting any Award the Participant consents to receive documents by electronic delivery and to participate in the Plan through any on-line electronic system established and maintained by the Plan Administrator or another third party selected by the Plan Administrator. The form of delivery of any Common Stock (e.g., a stock certificate or electronic entry evidencing such shares) shall be determined by the Company.

(l) **Clawback/Recovery.** All Awards granted under the Plan will be subject to recoupment in accordance with any clawback policy that the Company is required to adopt pursuant to the listing standards of any national securities exchange or association on which the Company's securities are listed or as is otherwise required by the Dodd-Frank Wall Street Reform and Consumer Protection Act or other Applicable Law, and any other clawback policy that the Company adopts. In addition, the Board may impose such other clawback, recovery or recoupment provisions in an Award Agreement as the Board determines necessary or appropriate, including but not limited to a reacquisition right in respect of previously acquired shares of Common Stock or other cash or property upon the occurrence of Cause. No recovery of compensation under such a clawback policy will be an event giving rise to a Participant's right to voluntarily terminate employment upon a "resignation for good reason," or for a "constructive termination" or any similar term under any plan of or agreement with the Company.

(m) **Securities Law Compliance.** A Participant will not be issued any shares in respect of an Award unless either (i) the shares are registered under the Securities Act; or (ii) the Company has determined that such issuance would be exempt from the registration requirements of the Securities Act. Each Award also must comply with other Applicable Law governing the Award, and a Participant will not receive such shares if the Company determines that such receipt would not be in material compliance with Applicable Law.

(n) **Transfer or Assignment of Awards; Issued Shares.** Except as expressly provided in the Plan or the form of Award Agreement, Awards granted under the Plan may not be transferred or assigned by the Participant. After the vested shares subject to an Award have been issued, or in the case of Restricted Stock and similar awards, after the issued shares have vested, the holder of such shares is free to assign, hypothecate, donate, encumber or otherwise dispose of any interest in such shares provided that any such actions are in compliance with the provisions herein, the terms of the Trading Policy and Applicable Law.

(o) **Effect on Other Employee Benefit Plans.** The value of any Award granted under the Plan, as determined upon grant, vesting or settlement, shall not be included as compensation, earnings, salaries, or other similar terms used when calculating any Participant's benefits under any employee benefit plan sponsored by the Company or any Affiliate, except as such plan otherwise expressly provides. The Company expressly reserves its rights to amend, modify, or terminate any of the Company's or any Affiliate's employee benefit plans.

(p) **Deferrals.** To the extent permitted by Applicable Law, the Board, in its sole discretion, may determine that the delivery of Common Stock or the payment of cash, upon the exercise, vesting or settlement of all or a portion of any Award may be deferred and may also establish programs and procedures for deferral elections to be made by Participants. Deferrals by will be made in accordance with the requirements of Section 409A.

(q) **Section 409A.** Unless otherwise expressly provided for in an Award Agreement, the Plan and Award Agreements will be interpreted to the greatest extent possible in a manner that makes the Plan and the Awards granted hereunder exempt from Section 409A, and, to the extent not so exempt, in compliance with the requirements of Section 409A. If the Board determines that any Award granted hereunder is not exempt from and is therefore subject to Section 409A, the Award Agreement evidencing

such Award will incorporate the terms and conditions necessary to avoid the consequences specified in Section 409A(a)(1) of the Code, and to the extent an Award Agreement is silent on terms necessary for compliance, such terms are hereby incorporated by reference into the Award Agreement. Notwithstanding anything to the contrary in this Plan (and unless the Award Agreement specifically provides otherwise), if the shares of Common Stock are publicly traded, and if a Participant holding an Award that constitutes “deferred compensation” under Section 409A is a “specified employee” for purposes of Section 409A, no distribution or payment of any amount that is due because of a “separation from service” (as defined in Section 409A without regard to alternative definitions thereunder) will be issued or paid before the date that is six months and one day following the date of such Participant’s “separation from service” or, if earlier, the date of the Participant’s death, unless such distribution or payment can be made in a manner that complies with Section 409A, and any amounts so deferred will be paid in a lump sum on the day after such six month period elapses, with the balance paid thereafter on the original schedule.

(r) **Data Privacy.** By accepting an Award granted under the Plan, a Participant thereby explicitly and unambiguously consents to the collection, use and transfer, in electronic or other form, of such Participant’s personal data as described herein by and among, as applicable, the Employer, and the Company and its other Affiliates and the Plan Administrator for the exclusive purpose of implementing, administering and managing such Participant’s participation in the Plan. Each Participant understands that the Company and the Employer may hold certain personal information about such Participant, including, but not limited to, the Participant’s name, home address and telephone number, date of birth, social insurance number or other identification number, salary, nationality, job title, any shares of stock or directorships held in the Company, details of all Awards or any other entitlement to ordinary shares awarded, canceled, exercised, vested, unvested or outstanding in the Participant’s favor, for the purpose of implementing, administering and managing the Plan (the “*Data*”). Each Participant understands that Data may be transferred to any third parties assisting in the implementation, administration and management of the Plan, that these recipients may be located in the Participant’s country or elsewhere, and that the recipients’ country (e.g., the United States) may have different data privacy laws and protections than the Participant’s country. Each Participant understands that such Participant may request a list with the names and addresses of any potential recipients of the Data by contacting the Participant’s local human resources representative. Each Participant authorizes the recipients to receive, possess, use, retain and transfer the Data, in electronic or other form, for the sole purpose of implementing, administering and managing the Participant’s participation in the Plan, including any requisite transfer of such Data as may be required to a broker or other third party with whom such Participant may elect to deposit any ordinary shares acquired pursuant to an Award. Each Participant understands that Data will be held only as long as is necessary to implement, administer and manage such Participant’s participation in the Plan. Each Participant understands that such Participant may, at any time, view Data, request additional information about the storage and processing of Data, require any necessary amendments to Data or refuse or withdraw the consents herein, without cost, by contacting in writing such Participant’s local human resources representative. Each Participant understands, however, that refusing or withdrawing such Participant’s consent may affect such Participant’s ability to participate in the Plan. For more information on the consequences of refusal to consent or withdrawal of consent, each Participant understands that such Participant may contact his or her local human resources representative.

(s) **Choice of Law.** This Plan and any controversy arising out of or relating to this Plan shall be governed by, and construed in accordance with, the internal laws of the State of California, without regard to conflict of law principles that would result in any application of any law other than the law of the State of California.

11. **Covenants of the Company.**

(a) **Securities Law Compliance.** The Company will seek to obtain from each regulatory commission or agency having jurisdiction over the Plan such authority as may be required to grant Awards and to issue and sell shares of Common Stock upon exercise of the Awards; *provided, however*, that this undertaking will not require the Company to register under the Securities Act the Plan, any Award or any Common Stock issued or issuable pursuant to any such Award. If, after reasonable efforts, the Company is unable to obtain from any such regulatory commission or agency the authority that counsel for the Company deems necessary for the lawful issuance and sale of Common Stock under the Plan, the Company will be relieved from any liability for failure to issue and sell Common Stock upon exercise of such Awards unless and until such authority is obtained. A Participant is not eligible for the grant of an Award or the subsequent issuance of Common Stock pursuant to the Award if such grant or issuance would be in violation of any Applicable Law.

(b) **No Obligation to Notify or Minimize Taxes; No Liability for Taxes.** The Company has no duty or obligation to any Participant to advise such holder as to the time or manner of exercising such Award. Furthermore, the Company has no duty or obligation to warn or otherwise advise such holder of a pending termination or expiration of an Award or a possible period in which the Award may not be exercised. The Company has no duty or obligation to minimize the tax consequences of an Award to the holder of such Award and will not be liable to any holder of an Award for any adverse tax consequences to such holder in connection with an Award. As a condition to accepting an Award under the Plan, each Participant (i) agrees to not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates related to tax liabilities arising from such Award or other Company compensation and (ii) acknowledges that such Participant was advised to consult with his or her own personal tax, financial and other legal advisors regarding the tax consequences of the Award and has either done so or knowingly and

voluntarily declined to do so. Additionally, each Participant acknowledges any Option or SAR granted under the Plan is exempt from Section 409A only if the exercise or strike price is at least equal to the “fair market value” of the Common Stock on the date of grant as determined by the Internal Revenue Service and there is no other impermissible deferral of compensation associated with the Award. Additionally, as a condition to accepting an Option or SAR granted under the Plan, each Participant agrees not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates in the event that the Internal Revenue Service asserts that such exercise price or strike price is less than the “fair market value” of the Common Stock on the date of grant as subsequently determined by the Internal Revenue Service.

12. **Additional Rules for Awards Subject to Section 409A.**

(a) **Application.** Unless the provisions of this Section 12 of the Plan are expressly superseded by the provisions in the form of Award Agreement, the provisions of this Section 12 shall apply and shall supersede anything to the contrary set forth in the Award Agreement for a Non-Exempt Award.

(b) **Non-Exempt Awards Subject to Non-Exempt Severance Arrangements.** To the extent a Non-Exempt Award is subject to Section 409A due to application of a Non-Exempt Severance Arrangement, the following provisions of Section 12(b) apply.

(i) If the Non-Exempt Award vests in the ordinary course during the Participant’s Continuous Service in accordance with the vesting schedule set forth in the Award Agreement, and does not accelerate vesting under the terms of a Non-Exempt Severance Arrangement, in no event will the shares be issued in respect of such Non-Exempt Award any later than the later of: (i) December 31st of the calendar year that includes the applicable vesting date, or (ii) the 60th day that follows the applicable vesting date.

(ii) If vesting of the Non-Exempt Award accelerates under the terms of a Non-Exempt Severance Arrangement in connection with the Participant’s Separation from Service, and such vesting acceleration provisions were in effect as of the date of grant of the Non-Exempt Award and, therefore, are part of the terms of such Non-Exempt Award as of the date of grant, then the shares will be earlier issued in settlement of such Non-Exempt Award upon the Participant’s Separation from Service in accordance with the terms of the Non-Exempt Severance Arrangement, but in no event later than the 60th day that follows the date of the Participant’s Separation from Service. However, if at the time the shares would otherwise be issued the Participant is subject to the distribution limitations contained in Section 409A applicable to “specified employees,” as defined in Section 409A(a)(2)(B)(i) of the Code, such shares shall not be issued before the date that is six months following the date of such Participant’s Separation from Service, or, if earlier, the date of the Participant’s death that occurs within such six month period.

(iii) If vesting of a Non-Exempt Award accelerates under the terms of a Non-Exempt Severance Arrangement in connection with a Participant’s Separation from Service, and such vesting acceleration provisions were not in effect as of the date of grant of the Non-Exempt Award and, therefore, are not a part of the terms of such Non-Exempt Award on the date of grant, then such acceleration of vesting of the Non-Exempt Award shall not accelerate the issuance date of the shares, but the shares shall instead be issued on the same schedule as set forth in the Grant Notice as if they had vested in the ordinary course during the Participant’s Continuous Service, notwithstanding the vesting acceleration of the Non-Exempt Award. Such issuance schedule is intended to satisfy the requirements of payment on a specified date or pursuant to a fixed schedule, as provided under Treasury Regulations Section 1.409A-3(a)(4).

(c) **Treatment of Non-Exempt Awards Upon a Change in Control for Employees and Consultants.** The provisions of this Section 12(c) shall apply and shall supersede anything to the contrary set forth in the Plan with respect to the permitted treatment of any Non-Exempt Award in connection with a Change in Control if the Participant was either an Employee or Consultant upon the applicable date of grant of the Non-Exempt Award.

(i) **Vested Non-Exempt Awards:** The following provisions shall apply to any Vested Non-Exempt Award in connection with a Change in Control:

(1) If the Change in Control is also a Section 409A Change of Control, then the Acquiring Entity may not assume, continue or substitute the Vested Non-Exempt Award. Upon the Section 409A Change of Control the settlement of the Vested Non-Exempt Award will automatically be accelerated and the shares will be immediately issued in respect of the Vested Non-Exempt Award. Alternatively, the Company may instead provide that the Participant will receive a cash settlement equal to the Fair Market Value of the shares that would otherwise be issued to the Participant upon the Section 409A Change of Control.

(2) If the Change in Control is not also a Section 409A Change of Control, then the Acquiring Entity must either assume, continue or substitute each Vested Non-Exempt Award. The shares to be issued in respect of the Vested Non-Exempt Award shall be issued to the Participant by the Acquiring Entity on the same schedule that the shares would have been issued to the Participant if the Change in Control had not occurred. In the Acquiring Entity’s discretion, in lieu of an issuance of shares, the Acquiring Entity may instead substitute a cash payment on each applicable issuance date, equal to the Fair Market

Value of the shares that would otherwise be issued to the Participant on such issuance dates, with the determination of the Fair Market Value of the shares made on the date of the Change in Control.

(ii) **Unvested Non-Exempt Awards.** The following provisions shall apply to any Unvested Non-Exempt Award unless otherwise determined by the Board pursuant to Section 12(e).

(1) In the event of a Change in Control, the Acquiring Entity shall assume, continue or substitute any Unvested Non-Exempt Award. Unless otherwise determined by the Board, any Unvested Non-Exempt Award will remain subject to the same vesting and forfeiture restrictions that were applicable to the Award prior to the Change in Control. The shares to be issued in respect of any Unvested Non-Exempt Award shall be issued to the Participant by the Acquiring Entity on the same schedule that the shares would have been issued to the Participant if the Change in Control had not occurred. In the Acquiring Entity's discretion, in lieu of an issuance of shares, the Acquiring Entity may instead substitute a cash payment on each applicable issuance date, equal to the Fair Market Value of the shares that would otherwise be issued to the Participant on such issuance dates, with the determination of Fair Market Value of the shares made on the date of the Change in Control.

(2) If the Acquiring Entity will not assume, substitute or continue any Unvested Non-Exempt Award in connection with a Change in Control, then such Award shall automatically terminate and be forfeited upon the Change in Control with no consideration payable to any Participant in respect of such forfeited Unvested Non-Exempt Award. Notwithstanding the foregoing, to the extent permitted and in compliance with the requirements of Section 409A, the Board may in its discretion determine to elect to accelerate the vesting and settlement of the Unvested Non-Exempt Award upon the Change in Control, or instead substitute a cash payment equal to the Fair Market Value of such shares that would otherwise be issued to the Participant, as further provided in Section 12(e)(ii) below. In the absence of such discretionary election by the Board, any Unvested Non-Exempt Award shall be forfeited without payment of any consideration to the affected Participants if the Acquiring Entity will not assume, substitute or continue the Unvested Non-Exempt Awards in connection with the Change in Control.

(3) The foregoing treatment shall apply with respect to all Unvested Non-Exempt Awards upon any Change in Control, and regardless of whether or not such Change in Control is also a Section 409A Change of Control.

(d) **Treatment of Non-Exempt Awards Upon a Change in Control for Non-Employee Directors.** The following provisions of this Section 12(d) shall apply and shall supersede anything to the contrary that may be set forth in the Plan with respect to the permitted treatment of a Non-Exempt Director Award in connection with a Change in Control.

(i) If the Change in Control is also a Section 409A Change of Control, then the Acquiring Entity may not assume, continue or substitute the Non-Exempt Director Award. Upon the Section 409A Change of Control the vesting and settlement of any Non-Exempt Director Award will automatically be accelerated and the shares will be immediately issued to the Participant in respect of the Non-Exempt Director Award. Alternatively, the Company may provide that the Participant will instead receive a cash settlement equal to the Fair Market Value of the shares that would otherwise be issued to the Participant upon the Section 409A Change of Control pursuant to the preceding provision.

(ii) If the Change in Control is not also a Section 409A Change of Control, then the Acquiring Entity must either assume, continue or substitute the Non-Exempt Director Award. Unless otherwise determined by the Board, the Non-Exempt Director Award will remain subject to the same vesting and forfeiture restrictions that were applicable to the Award prior to the Change in Control. The shares to be issued in respect of the Non-Exempt Director Award shall be issued to the Participant by the Acquiring Entity on the same schedule that the shares would have been issued to the Participant if the Change in Control had not occurred. In the Acquiring Entity's discretion, in lieu of an issuance of shares, the Acquiring Entity may instead substitute a cash payment on each applicable issuance date, equal to the Fair Market Value of the shares that would otherwise be issued to the Participant on such issuance dates, with the determination of Fair Market Value made on the date of the Change in Control.

(e) If the RSU Award is a Non-Exempt Award, then the provisions in this Section 12(e) shall apply and supersede anything to the contrary that may be set forth in the Plan or the Award Agreement with respect to the permitted treatment of such Non-Exempt Award:

(i) Any exercise by the Board of discretion to accelerate the vesting of a Non-Exempt Award shall not result in any acceleration of the scheduled issuance dates for the shares in respect of the Non-Exempt Award unless earlier issuance of the shares upon the applicable vesting dates would be in compliance with the requirements of Section 409A.

(ii) The Company explicitly reserves the right to earlier settle any Non-Exempt Award to the extent permitted and in compliance with the requirements of Section 409A, including pursuant to any of the exemptions available in Treasury Regulations Section 1.409A-3(j)(4)(ix).

(iii) To the extent the terms of any Non-Exempt Award provide that it will be settled upon a Change in Control or Change of Control, to the extent it is required for compliance with the requirements of Section 409A, the Change in Control or Change of Control event triggering settlement must also constitute a Section 409A Change of Control. To the extent the terms of a Non-Exempt Award provides that it will be settled upon a termination of employment or termination of Continuous

Service, to the extent it is required for compliance with the requirements of Section 409A, the termination event triggering settlement must also constitute a Separation From Service. However, if at the time the shares would otherwise be issued to a Participant in connection with a “separation from service” such Participant is subject to the distribution limitations contained in Section 409A applicable to “specified employees,” as defined in Section 409A(a)(2)(B)(i) of the Code, such shares shall not be issued before the date that is six months following the date of the Participant’s Separation From Service, or, if earlier, the date of the Participant’s death that occurs within such six month period.

(iv) The provisions in Section 12(e) for delivery of the shares in respect of the settlement of a RSU Award that is a Non-Exempt Award are intended to comply with the requirements of Section 409A so that the delivery of the shares to the Participant in respect of such Non-Exempt Award will not trigger the additional tax imposed under Section 409A, and any ambiguities herein will be so interpreted.

13. **Severability.**

If all or any part of the Plan or any Award Agreement is declared by any court or governmental authority to be unlawful or invalid, such unlawfulness or invalidity shall not invalidate any portion of the Plan or such Award Agreement not declared to be unlawful or invalid. Any Section of the Plan or any Award Agreement (or part of such a Section) so declared to be unlawful or invalid shall, if possible, be construed in a manner which will give effect to the terms of such Section or part of a Section to the fullest extent possible while remaining lawful and valid.

14. **Termination of the Plan.**

The Board may suspend or terminate the Plan at any time. No Incentive Stock Options may be granted after the tenth anniversary of the earlier of: (i) the Adoption Date, or (ii) the Effective Date. No Awards may be granted under the Plan while the Plan is suspended or after it is terminated.

15. **Definitions.**

As used in the Plan, the following definitions apply to the capitalized terms indicated below:

- (a) **“Acquiring Entity”** means the surviving or acquiring corporation (or its parent company) in connection with a Change in Control.
- (b) **“Adoption Date”** means the date the Plan is first approved by the Compensation Committee of the Board.
- (c) **“Affiliate”** means, at the time of determination, any “parent” or “subsidiary” of the Company as such terms are defined in Rule 405 promulgated under the Securities Act. The Board may determine the time or times at which “parent” or “subsidiary” status is determined within the foregoing definition.
- (d) **“Annual Meeting”** means the annual meeting of stockholders of the Company.
- (e) **“Applicable Law”** means shall mean any applicable securities, federal, state, foreign, material local or municipal or other law, statute, constitution, principle of common law, resolution, ordinance, code, edict, decree, rule, listing rule, regulation, judicial decision, ruling or requirement issued, enacted, adopted, promulgated, implemented or otherwise put into effect by or under the authority of any Governmental Body (or under the authority of the NASDAQ Stock Market or the Financial Industry Regulatory Authority).
- (f) **“Appreciation Award”** means (i) a stock option or stock appreciation right granted under any of the Prior Plans or (ii) an Option or SAR granted under the Plan, in each case with respect to which the exercise or strike price is at least 100% of the Fair Market Value of the Common Stock subject to the option or stock appreciation right, as applicable, on the date of grant.
- (g) **“Automatic Grant Program”** means the grant program in effect for Eligible Directors under Section 7 of the Plan.
- (h) **“Award”** means any right to receive Common Stock granted under the Plan, including an Incentive Stock Option, a Nonstatutory Stock Option, a Restricted Stock Award, a RSU Award, a SAR, a Performance Award or any Other Award.
- (i) **“Award Agreement”** means a written agreement between the Company and a Participant evidencing the terms and conditions of an Award. The Award Agreement generally consists of the Grant Notice and General Terms and Conditions.
- (j) **“Board”** means the Board of Directors of the Company. Any decision or determination made by the Board shall be a decision or determination that is made in the sole discretion of the Board (or its designee), and such decision or determination shall be final and binding on all Participants.
- (k) **“Capitalization Adjustment”** means any change that is made in, or other events that occur with respect to, the Common Stock subject to the Plan or subject to any Award after the Effective Date without the receipt of consideration by the

Company through merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, large nonrecurring cash dividend, stock split, reverse stock split, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or any similar equity restructuring transaction, as that term is used in Statement of Financial Accounting Standards Board Accounting Standards Codification Topic 718 (or any successor thereto). Notwithstanding the foregoing, the conversion of any convertible securities of the Company will not be treated as a Capitalization Adjustment.

(l) “**Cause**” has the meaning ascribed to such term in any written agreement between the Participant and the Company defining such term and, in the absence of such agreement, such term means, with respect to a Participant, the occurrence of any of the following events that has a material negative impact on the business or reputation of the Company: (i) such Participant’s attempted commission of, or participation in, a fraud or act of dishonesty against the Company; (ii) such Participant’s intentional, material violation of any contract or agreement between the Participant and the Company or of any statutory duty owed to the Company; (iii) such Participant’s unauthorized use or disclosure of the Company’s confidential information or trade secrets; or (iv) such Participant’s gross misconduct. The determination that a termination of the Participant’s Continuous Service is either for Cause or without Cause will be made by the Board with respect to Participants who are executive officers of the Company and by the Company’s Chief Executive Officer with respect to Participants who are not executive officers of the Company. Any determination by the Company that the Continuous Service of a Participant was terminated with or without Cause for the purposes of outstanding Awards held by such Participant will have no effect upon any determination of the rights or obligations of the Company or such Participant for any other purpose.

(m) “**Change in Control**” or “**Change of Control**” means the occurrence, in a single transaction or in a series of related transactions, of any one or more of the following events constituting a change in ownership or control of the Company; provided, however, to the extent necessary to avoid adverse personal income tax consequences to the Participant in connection with an Award, such transaction also constitutes a Section 409A Change of Control:

(i) a merger, consolidation or other reorganization approved by the Company’s stockholders, unless securities representing more than fifty percent (50%) of the total combined voting power of the voting securities of the successor corporation are immediately thereafter beneficially owned, directly or indirectly and in substantially the same proportion, by the persons who beneficially owned the Company’s outstanding voting securities immediately prior to such transaction,

(ii) a stockholder-approved sale, transfer or other disposition of all or substantially all of the Company’s assets in complete liquidation or dissolution of the Company, or

(iii) the closing of any transaction or series of related transactions pursuant to which any person or any group of persons comprising a “group” within the meaning of Rule 13d-5(b)(1) of the Exchange Act (other than the Company or a person that, prior to such transaction or series of related transactions, directly or indirectly controls, is controlled by or is under common control with, the Company) becomes directly or indirectly the beneficial owner (within the meaning of Rule 13d-3 of the Exchange Act) of securities possessing (or convertible into or exercisable for securities possessing) more than fifty percent (50%) of the total combined voting power of the Company’s securities (as measured in terms of the power to vote with respect to the election of Board members) outstanding immediately after the consummation of such transaction or series of related transactions, whether such transaction involves a direct issuance from the Company or the acquisition of outstanding securities held by one or more of the Company’s existing stockholders.

Notwithstanding the foregoing or any other provision of this Plan, (A) the term Change in Control shall not include a sale of assets, merger or other transaction effected exclusively for the purpose of changing the domicile of the Company, and (B) the definition of Change in Control (or any analogous term) in an individual written agreement between the Company or any Affiliate and the Participant shall supersede the foregoing definition with respect to Awards subject to such agreement; *provided, however*, that (1) if no definition of Change in Control (or any analogous term) is set forth in such an individual written agreement, the foregoing definition shall apply; and (2) no Change in Control (or any analogous term) will be deemed to occur with respect to Awards subject to such an individual written agreement without a requirement that the Change in Control (or any analogous term) actually occur.

(n) “**Code**” means the Internal Revenue Code of 1986, as amended, including any applicable regulations and guidance thereunder.

(o) “**Committee**” means the Compensation Committee and any other committee of Directors to whom authority has been delegated by the Board or Compensation Committee in accordance with Section 8(d).

(p) “**Common Stock**” means the common stock of the Company.

(q) “**Company**” means Sangamo Therapeutics, Inc., a Delaware corporation.

(r) “**Compensation Committee**” means the Compensation Committee of the Board.

(s) **“Consultant”** means any person, including an advisor, who is (i) engaged by the Company or an Affiliate to render consulting or advisory services and is compensated for such services, or (ii) serving as a member of the board of directors of an Affiliate and is compensated for such services. However, service solely as a Director, or payment of a fee for such service, will not cause a Director to be considered a “Consultant” for purposes of the Plan. Notwithstanding the foregoing, a person is treated as a Consultant under this Plan only if a Form S-8 Registration Statement under the Securities Act is available to register either the offer or the sale of the Company’s securities to such person.

(t) **“Continuous Service”** means that the Participant’s service with the Company or an Affiliate, whether as an Employee, Director or Consultant, is not interrupted or terminated. A change in the capacity in which the Participant renders service to the Company or an Affiliate as an Employee, Director or Consultant or a change in the Entity for which the Participant renders such service, provided that there is no interruption or termination of the Participant’s service with the Company or an Affiliate, will not terminate a Participant’s Continuous Service; *provided, however*, that if the Entity for which a Participant is rendering services ceases to qualify as an Affiliate, as determined by the Board, such Participant’s Continuous Service will be considered to have terminated on the date such Entity ceases to qualify as an Affiliate. For example, a change in status from an Employee of the Company to a Consultant of an Affiliate or to a Director will not constitute an interruption of Continuous Service. To the extent permitted by law, the Board or the chief executive officer of the Company, in that party’s sole discretion, may determine whether Continuous Service will be considered interrupted in the case of (i) any leave of absence approved by the Board or chief executive officer, including sick leave, military leave or any other personal leave, or (ii) transfers between the Company, an Affiliate, or their successors. Notwithstanding the foregoing, a leave of absence will be treated as Continuous Service for purposes of vesting in an Award only to such extent as may be provided in the Company’s leave of absence policy, in the written terms of any leave of absence agreement or policy applicable to the Participant, or as otherwise required by law. In addition, to the extent required for exemption from or compliance with Section 409A, the determination of whether there has been a termination of Continuous Service will be made, and such term will be construed, in a manner that is consistent with the definition of “separation from service” as defined under Treasury Regulation Section 1.409A-1(h) (without regard to any alternative definition thereunder).

(u) **“Director”** means a member of the Board.

(v) **“Disability”** means, with respect to a Participant, such Participant is unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or which has lasted or can be expected to last for a continuous period of not less than 12 months, as provided in Section 22(e)(3) of the Code, and will be determined by the Board on the basis of such medical evidence as the Board deems warranted under the circumstances.

(w) **“Effective Date”** means the date of the Annual Meeting in 2018, provided this Plan is approved by the Company’s stockholders at such meeting.

(x) **“Eligible Director”** means a Director who is not an Employee.

(y) **“Employee”** means any person employed by the Company or an Affiliate. However, service solely as a Director, or payment of a fee for such services, will not cause a Director to be considered an “Employee” for purposes of the Plan.

(z) **“Employer”** means the Company or the Affiliate of the Company that employs the Participant.

(aa) **“Entity”** means a corporation, partnership, limited liability company or other entity.

(bb) **“Exchange Act”** means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

(cc) **“Fair Market Value”** means, as of any date, the value of the Common Stock (as determined on a per share or aggregate basis, as applicable) determined as follows:

(i) If the Common Stock is listed on any established stock exchange or traded on any established market, the Fair Market Value will be the closing sales price for such stock as quoted on such exchange or market (or the exchange or market with the greatest volume of trading in the Common Stock) on the date of determination, as reported in a source the Board deems reliable.

(ii) If there is no closing sales price for the Common Stock on the date of determination, then the Fair Market Value will be the closing selling price on the last preceding date for which such quotation exists.

(iii) In the absence of such markets for the Common Stock, or if otherwise determined by the Board, the Fair Market Value will be determined by the Board in good faith and in a manner that complies with Sections 409A and 422 of the Code.

(dd) **“Full Value Award”** means an Award granted under the Plan or an award granted under the Prior Plans that is not an Appreciation Award.

(ee) “**General Terms and Conditions**” means the written summary of the general terms and conditions applicable to an Award and which is provided to a Participant along with the Grant Notice.

(ff) “**Governmental Body**” means any: (a) nation, state, commonwealth, province, territory, county, municipality, district or other jurisdiction of any nature; (b) federal, state, local, municipal, foreign or other government; (c) governmental or regulatory body, or quasi-governmental body of any nature (including any governmental division, department, administrative agency or bureau, commission, authority, instrumentality, official, ministry, fund, foundation, center, organization, unit, body or Entity and any court or other tribunal, and for the avoidance of doubt, any Tax authority) or other body exercising similar powers or authority; or (d) self-regulatory organization (including the Nasdaq Stock Market and the Financial Industry Regulatory Authority).

(gg) “**Grant Notice**” means the written notice provided to a Participant that he or she has been granted an Award under the Plan and which includes the name of the Participant, the type of Award, the date of grant of the Award, number of shares of Common Stock subject to the Award (if any), the vesting schedule for the Award (if any) and other key terms applicable to the Award.

(hh) “**Hostile Take-Over**” means a change in ownership or control of the Company effected through either of the following transactions:

(i) a change in the composition of the Board over a period of thirty-six (36) consecutive months or less such that a majority of the Board members ceases, by reason of one or more contested elections for Board membership, to be comprised of individuals who either (A) have been Board members continuously since the beginning of such period or (B) have been elected or nominated for election as Board members during such period by at least a majority of the Board members described in clause (A) who were still in office at the time the Board approved such election or nomination, or

(ii) a Hostile Tender-Offer.

(ii) “**Hostile Tender-Offer**” means the acquisition, directly or indirectly, by any person or related group of persons (other than the Company or a person that directly or indirectly controls, is controlled by, or is under common control with, the Company) of beneficial ownership (within the meaning of Rule 13d-3 of the Exchange Act) of securities possessing more than fifty percent (50%) of the total combined voting power of the Company’s outstanding securities pursuant to a tender or exchange offer made directly to the Company’s stockholders which the Board does not recommend such stockholders to accept.

(jj) “**Incentive Stock Option**” means an option granted pursuant to Section 4 of the Plan that is intended to be, and qualifies as, an “incentive stock option” within the meaning of Section 422 of the Code.

(kk) “**Non-Employee Director**” means a Director who either (i) is not a current employee or officer of the Company or an Affiliate, does not receive compensation, either directly or indirectly, from the Company or an Affiliate for services rendered as a consultant or in any capacity other than as a Director (except for an amount as to which disclosure would not be required under Item 404(a) of Regulation S-K promulgated pursuant to the Securities Act (“**Regulation S-K**”)), does not possess an interest in any other transaction for which disclosure would be required under Item 404(a) of Regulation S-K, and is not engaged in a business relationship for which disclosure would be required pursuant to Item 404(b) of Regulation S-K; or (ii) is otherwise considered a “non-employee director” for purposes of Rule 16b-3.

(ll) “**Non-Exempt Award**” means any Award that is subject to, and not exempt from, Section 409A, including as the result of (i) a deferral of the issuance of the shares subject to the Award which is elected by the Participant or imposed by the Company, or (ii) the terms of any Non-Exempt Severance Agreement.

(mm) “**Non-Exempt Director Award**” means a Non-Exempt Award granted to a Participant who was a Director but not an Employee on the applicable grant date.

(nn) “**Non-Exempt Severance Arrangement**” means a severance arrangement or other agreement between the Participant and the Company that provides for acceleration of vesting of an Award and issuance of the shares in respect of such Award upon the Participant’s termination of employment or separation from service (as such term is defined in Section 409A(a)(2)(A)(i) of the Code (and without regard to any alternative definition thereunder) (“**Separation from Service**”) and such severance benefit does not satisfy the requirements for an exemption from application of Section 409A provided under Treasury Regulations Section 1.409A-1(b)(4), 1.409A-1(b)(9) or otherwise.

(oo) “**Nonstatutory Stock Option**” means any option granted pursuant to Section 4 of the Plan that does not qualify as an Incentive Stock Option.

(pp) “**Officer**” means a person who is an officer of the Company within the meaning of Section 16 of the Exchange Act.

(qq) “**Option**” means an Incentive Stock Option or a Nonstatutory Stock Option to purchase shares of Common Stock granted pursuant to the Plan.

(rr) **“Option Agreement”** means a written agreement between the Company and an Optionholder evidencing the terms and conditions of an Option grant and which includes the Option Grant Notice and the Option Terms and Conditions. Each Option Agreement will be subject to the terms and conditions of the Plan.

(ss) **“Optionholder”** means a person to whom an Option is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Option.

(tt) **“Other Award”** means an award based in whole or in part by reference to the Common Stock which is granted pursuant to the terms and conditions of Section 5(c).

(uu) **“Other Award Agreement”** means a written agreement between the Company and a holder of an Other Award evidencing the terms and conditions of an Other Award grant. Each Other Award Agreement will be subject to the terms and conditions of the Plan.

(vv) **“Own,” “Owned,” “Owner,” “Ownership”** means that a person or Entity will be deemed to “Own,” to have “Owned,” to be the “Owner” of, or to have acquired “Ownership” of securities if such person or Entity, directly or indirectly, through any contract, arrangement, understanding, relationship or otherwise, has or shares voting power, which includes the power to vote or to direct the voting, with respect to such securities.

(ww) **“Participant”** means an Employee, Director or Consultant to whom an Award is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Award.

(xx) **“Performance Award”** means an Award that may vest or may be exercised contingent upon the attainment during a Performance Period of certain Performance Goals and which is granted under the terms and conditions of Section 5(b).

(yy) **“Performance Criteria”** means the one or more criteria that the Board will select for purposes of establishing the Performance Goals for a Performance Period. The Performance Criteria that will be used to establish such Performance Goals may be based on any one of, or combination of, the following as determined by the Board: (i) earnings (including earnings per share and net earnings); (ii) earnings before interest, taxes and depreciation; (iii) earnings before interest, taxes, depreciation and amortization; (iv) earnings before interest, taxes, depreciation, amortization and legal settlements; (v) earnings before interest, taxes, depreciation, amortization, legal settlements and other income (expense); (vi) earnings before interest, taxes, depreciation, amortization, legal settlements, other income (expense) and stock-based compensation; (vii) earnings before interest, taxes, depreciation, amortization, legal settlements, other income (expense), stock-based compensation and changes in deferred revenue; (viii) total stockholder return; (ix) return on equity or average stockholder’s equity; (x) return on assets, investment, or capital employed; (xi) stock price; (xii) profit (including gross profit) and/or margin (including gross margin); (xiii) income (before or after taxes); (xiv) operating income; (xv) operating income after taxes; (xvi) pre-tax profit; (xvii) operating cash flow; (xviii) sales or revenue targets; (xix) increases in revenue or product revenue; (xx) expenses and cost reduction goals; (xxi) improvement in or attainment of working capital levels; (xxii) economic value added (or an equivalent metric); (xxiii) market share; (xxiv) cash flow; (xxv) cash flow per share; (xxvi) share price performance; (xxvii) debt reduction; (xxviii) implementation or completion of projects or processes; (xxix) employee retention; (xxx) stockholders’ equity; (xxxi) capital expenditures; (xxxii) debt levels; (xxxiii) operating profit or net operating profit; (xxxiv) workforce diversity; (xxxv) growth of net income or operating income; (xxxvi) billings; (xxxvii) bookings; and (xxxviii) other measures of performance selected by the Board.

(zz) **“Performance Goals”** means, for a Performance Period, the one or more goals established by the Board for the Performance Period based upon the Performance Criteria. Performance Goals may be based on a Company-wide basis, with respect to one or more business units, divisions, Affiliates, or business segments, and in either absolute terms or relative to the performance of one or more comparable companies or the performance of one or more relevant indices. Unless specified otherwise by the Board (i) in the Award Agreement at the time the Award is granted or (ii) in such other document setting forth the Performance Goals at the time the Performance Goals are established, the Board will appropriately make adjustments in the method of calculating the attainment of Performance Goals for a Performance Period as follows: (1) to exclude restructuring and/or other nonrecurring charges; (2) to exclude exchange rate effects; (3) to exclude the effects of changes to generally accepted accounting principles; (4) to exclude the effects of any statutory adjustments to corporate tax rates; (5) to exclude the effects of items that are “unusual” in nature or occur “infrequently” as determined under generally accepted accounting principles; (6) to exclude the dilutive effects of acquisitions or joint ventures; (7) to assume that any business divested by the Company achieved performance objectives at targeted levels during the balance of a Performance Period following such divestiture; (8) to exclude the effect of any change in the outstanding shares of common stock of the Company by reason of any stock dividend or split, stock repurchase, reorganization, recapitalization, merger, consolidation, spin-off, combination or exchange of shares or other similar corporate change, or any distributions to common stockholders other than regular cash dividends; (9) to exclude the effects of stock based compensation and the award of bonuses under the Company’s bonus plans; (10) to exclude costs incurred in connection with potential acquisitions or divestitures that are required to be expensed under generally accepted accounting principles; and (11) to exclude the goodwill and intangible asset impairment charges that are required to be recorded under generally accepted accounting principles. In addition, the Board retains the discretion to reduce or eliminate the compensation or economic benefit due upon attainment of Performance Goals and to define the manner of calculating the Performance Criteria it selects to use for such Performance Period. Partial

achievement of the specified criteria may result in the payment or vesting corresponding to the degree of achievement as specified in the Award Agreement.

(aaa) “**Performance Period**” means the period of time selected by the Board over which the attainment of one or more Performance Goals will be measured for the purpose of determining a Participant’s right to vesting or exercise of an Award. Performance Periods may be of varying and overlapping duration, at the sole discretion of the Board.

(bbb) “**Plan**” means this Sangamo Therapeutics, Inc. 2018 Equity Incentive Plan.

(ccc) “**Plan Administrator**” means the person, persons, and/or third-party administrator designated by the Company to administer the day to day operations of the Plan and the Company’s other equity incentive programs.

(ddd) “**Post-Termination Exercise Period**” means the period following termination of a Participant’s Continuous Service within which an Option or SAR is exercisable, as specified in Section 4(g).

(eee) “**Predecessor Plan**” means the Company’s Amended and Restated 2013 Stock Incentive Plan.

(fff) “**Prior Plans**” means the Predecessor Plan and the Company’s 2004 Stock Incentive Plan (together).

(ggg) “**Prior Plans’ Returning Shares**” means shares of Common Stock subject to outstanding stock awards granted under the Prior Plans and that following the Effective Date: (A) are not issued because such stock award or any portion thereof expires or otherwise terminates without all of the shares covered by such stock award having been issued; (B) are not issued because such stock award or any portion thereof is settled in cash; or (C) are forfeited back to or repurchased by the Company because of the failure to meet a contingency or condition required for the vesting of such shares.

(hhh) “**Predecessor Plan’s Available Reserve**” means the number of shares available for the grant of new awards under the Predecessor Plan as of immediately prior to the Effective Date.

(iii) “**Prospectus**” means the document containing the Plan information specified in Section 10(a) of the Securities Act.

(jjj) “**Restricted Stock Award**” means an award of shares of Common Stock which is granted pursuant to the terms and conditions of Section 5(a).

(kkk) “**Restricted Stock Award Agreement**” means a written agreement between the Company and a holder of a Restricted Stock Award evidencing the terms and conditions of a Restricted Stock Award grant. Each Restricted Stock Award Agreement will be subject to the terms and conditions of the Plan.

(lll) “**RSU Award**” means an Award of restricted stock units representing the right to receive an issuance of shares of Common Stock which is granted pursuant to the terms and conditions of Section 5(a).

(mmm) “**RSU Award Agreement**” means a written agreement between the Company and a holder of a RSU Award evidencing the terms and conditions of a RSU Award grant. Each RSU Award Agreement will be subject to the terms and conditions of the Plan.

(nnn) “**Rule 16b-3**” means Rule 16b-3 promulgated under the Exchange Act or any successor to Rule 16b-3, as in effect from time to time.

(ooo) “**Rule 405**” means Rule 405 promulgated under the Securities Act.

(ppp) “**Section 409A**” means Section 409A of the Code and the regulations and other guidance thereunder.

(qqq) “**Section 409A Change of Control**” means a change in the ownership or effective control of the Company, or in the ownership of a substantial portion of the Company’s assets, as provided in Section 409A(a)(2)(A)(v) of the Code and Treasury Regulations Section 1.409A-3(i)(5) (without regard to any alternative definition thereunder).

(rrr) “**Securities Act**” means the Securities Act of 1933, as amended.

(sss) “**Share Reserve**” means the number of shares available for issuance under the Plan as set forth in Section 2(a), subject to adjustment pursuant to Section 6(a) in connection with Capitalization Adjustments.

(ttt) “**SAR**” or “**Stock Appreciation Right**” means a right to receive the appreciation on Common Stock that is granted pursuant to the terms and conditions of Section 4.

(uuu) “**SAR Agreement**” means a written agreement between the Company and a holder of a SAR evidencing the terms and conditions of a SAR grant. Each SAR Agreement will be subject to the terms and conditions of the Plan.

(vvv) “**Ten Percent Stockholder**” means a person who Owns (or is deemed to Own pursuant to Section 424(d) of the Code) stock possessing more than 10% of the total combined voting power of all classes of stock of the Company or any Affiliate.

(www) “**Trading Policy**” means the Company’s policy permitting certain individuals to sell Company shares only during certain “window” periods and/or otherwise restricts the ability of certain individuals to transfer or encumber Company shares, as in effect from time to time.

(xxx) “**Unvested Non-Exempt Award**” means the portion of any Non-Exempt Award that had not vested in accordance with its terms upon or prior to the date of any Change in Control.

(yyy) “**Vested Non-Exempt Award**” means the portion of any Non-Exempt Award that had vested in accordance with its terms upon or prior to the date of a Change in Control.

**FOURTH CERTIFICATE OF AMENDMENT OF THE
SEVENTH AMENDED AND RESTATED CERTIFICATE OF INCORPORATION
OF SANGAMO THERAPEUTICS, INC.**

Sangamo Therapeutics, Inc., a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware, hereby certifies that:

First: The name of the Corporation is Sangamo Therapeutics, Inc. (the “Corporation”).

Second: The date of filing of the Seventh Amended and Restated Certificate of Incorporation of the Corporation with the Secretary of State of the State of Delaware was April 11, 2000.

Third: The Board of Directors of the Corporation, acting in accordance with the provisions of Sections 141 and 242 of the General Corporation Law of the State of Delaware, adopted resolutions further amending its Seventh Amended and Restated Certificate of Incorporation as follows:

Paragraph A of ARTICLE IV of the Corporation’s Seventh Amended and Restated Certificate of Incorporation be, and it hereby is, amended and restated to read in its entirety as follows:

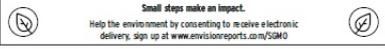
“A. Classes of Stock. The total number of shares of stock which the Corporation shall have authority to issue is three hundred twenty-five million (325,000,000), consisting of five million (5,000,000) shares of Preferred Stock, par value \$0.01 per share (the “Preferred Stock”), and three hundred twenty million (320,000,000) shares of Common Stock, par value \$0.01 per share (the “Common Stock”).”

Fourth: The foregoing amendment was submitted to the stockholders of the Corporation for their approval, and was duly adopted in accordance with the provisions of Section 242 of the General Corporation Law of the State of Delaware.

In Witness Whereof, Sangamo Therapeutics, Inc. has caused this Fourth Certificate of Amendment to be signed by its [Title] this day of , 20 .

Sangamo Therapeutics, Inc.

By: _____
[Name]
[Title]



▼ IF VOTING BY MAIL, SIGN, DETACH AND RETURN THE BOTTOM PORTION IN THE ENCLOSED ENVELOPE. ▼

Proxy – Sangamo Therapeutics, Inc. +

**PROXY SOLICITED BY THE BOARD OF DIRECTORS
FOR THE ANNUAL MEETING OF STOCKHOLDERS, TO BE HELD ON May 18, 2020**

The undersigned hereby appoints Alexander D. Macrae, M.B., Ch.B., Ph.D. and Sung H. Lee and each of them, as proxies of the undersigned, with full power of substitution, to vote all shares of Sangamo Therapeutics, Inc. Common Stock which the undersigned is entitled to vote on all matters which may properly come before the 2020 Annual Meeting of Stockholders of Sangamo Therapeutics, Inc., to be held on May 18, 2020 at 9:00 a.m. PDT or at any postponement or adjournment thereof.

THE SHARES REPRESENTED BY THIS PROXY CARD WILL BE VOTED AS SPECIFIED ON THE REVERSE SIDE, BUT IF NO SPECIFICATION IS MADE THEY WILL BE VOTED FOR ALL NOMINEES, AND FOR PROPOSALS 2, 3, 4, AND 5 AND AT THE DISCRETION OF THE PROXY ON ANY OTHER MATTER THAT MAY PROPERLY COME BEFORE THE MEETING.

(SEE PROXY STATEMENT FOR DISCUSSION OF ITEMS)

PLEASE SIGN, DATE AND RETURN PROMPTLY IN THE ACCOMPANYING ENVELOPE.

CONTINUED AND TO BE SIGNED ON REVERSE SIDE

Non-Voting Items

Change of Address - Please print new address below.

[Empty box for change of address]

Meeting Attendance
Mark box to the right if you plan to attend the Annual Meeting.

■ +