



Cytokinetics

Cytokinetics, Incorporated

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS

May 18, 2017

To the Stockholders:

NOTICE IS HEREBY GIVEN that the Annual Meeting of Stockholders of Cytokinetics, Incorporated (the "Company"), a Delaware corporation, will be held on Thursday, May 18, 2017, at 10:30 a.m. local time, at the Embassy Suites Hotel, 250 Gateway Boulevard, South San Francisco, CA 94080, for the following purposes:

1. To elect L. Patrick Gage, Edward M. Kaye and Wendell Wierenga as Class I Directors, each to serve for a three-year term and until their successors are duly elected and qualified (Proposal One);
2. To ratify the selection by the Audit Committee of the Board of Directors of PricewaterhouseCoopers LLP as the independent registered public accounting firm to the Company for the fiscal year ending December 31, 2017 (Proposal Two);
3. To approve an amendment to the Company's Amended and Restated 2004 Equity Incentive Plan (the "A&R 2004 EIP") to increase the number of authorized shares reserved for issuance under the A&R 2004 EIP by 3,900,000 shares. (Proposal Three);
4. To approve, on an advisory basis, the compensation of the named executive officers, as disclosed in the Company's Proxy Statement for the 2017 Annual Meeting of Stockholders (Proposal Four);
5. To determine, on an advisory basis, the frequency with which the stockholders of the Company wish to have an advisory vote on the compensation of the named executive officers (Proposal Five); and
6. To transact such other business as may properly be brought before the meeting and any adjournment(s) thereof.

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

Only stockholders of record at the close of business on March 27, 2017 are entitled to notice of and to vote at the meeting.

Sincerely,

Sharon A. Barbari
Corporate Secretary

South San Francisco, California
March 31, 2017

YOUR VOTE IS IMPORTANT

THIS PROXY STATEMENT IS FURNISHED IN CONNECTION WITH THE SOLICITATION OF PROXIES BY THE COMPANY, ON BEHALF OF THE BOARD OF DIRECTORS, FOR THE 2017 ANNUAL MEETING OF STOCKHOLDERS. THE NOTICE OF INTERNET AVAILABILITY OF PROXY MATERIALS IS BEING DISTRIBUTED ON OR ABOUT APRIL 6, 2017. IF YOU ARE A STOCKHOLDER OF RECORD YOU CAN VOTE YOUR SHARES USING ONE OF THE FOLLOWING METHODS:

- COMPLETE AND RETURN A WRITTEN PROXY CARD
- BY INTERNET OR TELEPHONE
- ATTEND THE COMPANY'S 2017 ANNUAL MEETING OF STOCKHOLDERS AND VOTE

ALL STOCKHOLDERS ARE CORDIALLY INVITED TO ATTEND THE MEETING. HOWEVER, TO ENSURE YOUR REPRESENTATION AT THE MEETING, YOU ARE URGED TO MARK, SIGN, DATE AND RETURN THE PROXY CARD THAT MAY BE MAILED TO YOU AS PROMPTLY AS POSSIBLE IN THE POSTAGE-PREPAID ENVELOPE PROVIDED FOR THAT PURPOSE OR VOTE YOUR SHARES BY INTERNET OR TELEPHONE. ANY STOCKHOLDER ATTENDING THE MEETING MAY VOTE IN PERSON EVEN IF HE OR SHE HAS RETURNED A PROXY CARD OR VOTED BY INTERNET OR TELEPHONE. 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 MEETING, YOU MUST OBTAIN A PROXY ISSUED IN YOUR NAME FROM THAT RECORD HOLDER.

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting of Stockholders to be Held on May 18, 2017

This Proxy Statement, Notice of Annual Meeting and Form of Proxy Card and the 2016 Annual Report to Stockholders are available at cytokinetix.com/proxy. You may obtain directions to the Annual Meeting of Stockholders by directing a request to:

Investor Relations
Cytokinetics, Incorporated
280 East Grand Avenue
South San Francisco, California 94080
email: investor@cytokinetix.com
Telephone: 650-624-3283

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CYTOKINETICS, INCORPORATED

280 East Grand Avenue
South San Francisco, California 94080

PROXY STATEMENT FOR THE ANNUAL MEETING OF STOCKHOLDERS May 18, 2017

INFORMATION CONCERNING SOLICITATION AND VOTING

General

The Board of Directors of Cytokinetics, Incorporated (the "Company", "we", "us", "our") is soliciting proxies for use at the Annual Meeting of Stockholders (the "Annual Meeting") to be held at the Embassy Suites Hotel, 250 Gateway Boulevard, South San Francisco, CA 94080, on Thursday, May 18, 2017, at 10:30 a.m. local time, and at any adjournment(s) thereof, for the purposes set forth herein and in the accompanying Notice of Annual Meeting of Stockholders. Our principal executive offices are located at the address listed at the top of the page and the telephone number is (650) 624-3000.

Pursuant to rules adopted by the Securities and Exchange Commission (the "SEC"), we have elected to provide access to our proxy materials over the internet. Accordingly, we have sent you a Notice of Internet Availability of Proxy Materials (the "Notice") because our Board of Directors is soliciting your proxy to vote at the Annual Meeting, including at any adjournments or postponements of the meeting. All stockholders will have the ability to access the proxy materials on the website referred to in the Notice or request to receive a printed set of the proxy materials. Instructions on how to access the proxy materials over the internet or to request a printed copy may be found in the Notice.

We intend to mail the Notice on or about April 6, 2017 to all stockholders of record entitled to vote at the Annual Meeting. We may send you a proxy card, along with a second Notice, on or after April 16, 2017.

WE WILL PROVIDE WITHOUT CHARGE TO ANY STOCKHOLDER SOLICITED BY THESE PROXY SOLICITATION MATERIALS A COPY OF OUR ANNUAL REPORT ON FORM 10-K, TOGETHER WITH THE FINANCIAL STATEMENTS REQUIRED TO BE FILED WITH THE ANNUAL REPORT ON FORM 10-K, UPON REQUEST OF THE STOCKHOLDER MADE IN WRITING TO CYTOKINETICS, INCORPORATED, 280 EAST GRAND AVENUE, SOUTH SAN FRANCISCO, CALIFORNIA, 94080, ATTN: INVESTOR RELATIONS, ANNUAL STOCKHOLDER MEETING.

Record Date and Share Ownership

Common stockholders of record at the close of business on March 27, 2017 (the "Record Date") are entitled to notice of and to vote at the Annual Meeting and at any adjournment(s) thereof. We have one class of common shares issued and outstanding, designated as Common Stock, \$0.001 par value per share (the "Common Stock"). As of the Record Date, 163,000,000 shares of Common Stock were authorized and 43,241,281 shares were issued and outstanding. As of the Record Date, 10,000,000 shares of Preferred Stock were authorized and none were outstanding.

Revocability of Proxies

Any proxy given pursuant to this solicitation may be revoked by the person giving it at any time before its use by: (i) issuing a later proxy, (ii) delivering to us at our principal offices (Attention: Corporate Secretary) a written notice of revocation, or (iii) attending the Annual Meeting and voting in person.

Voting

On all matters, each common share has one vote.

Cost of Proxy Solicitation

We will pay for the entire cost of soliciting proxies. In addition to these proxy materials, our directors and employees and D.F. King & Co., Inc. ("D.F. King"), our proxy solicitor, 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, but D.F. King will be paid its customary fee of approximately \$7,500, plus out-of-pocket expenses if it solicits proxies. We may also reimburse brokerage firms, banks and other agents for the cost of forwarding proxy materials to beneficial owners.

INFORMATION CONCERNING SOLICITATION AND VOTING

Voting in Person or by Proxy Card

If you are a stockholder of record, you may vote in person at the Annual Meeting or vote by proxy using the proxy card. Whether or not you plan to attend the Annual Meeting, we urge you to vote by proxy to ensure your vote is counted. You may still attend the Annual Meeting and vote in person 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 proxy card (that you may request or that we may elect to deliver at a later time), 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.

Voting via the Internet or by Telephone

Stockholders may also vote their shares by proxy by means of the telephone or on the Internet. The laws of the State of Delaware, under which we are incorporated, specifically permit electronically transmitted proxies, provided that each such proxy contains or is submitted with information from which the Inspector of Elections can determine that such proxy was authorized by the stockholder.

The telephone and Internet voting procedures below are designed to authenticate stockholders' identities, to allow stockholders to grant a proxy to vote their shares and to confirm that stockholders' instructions have been recorded properly. Stockholders granting a proxy to vote via the Internet should understand that there may be costs associated with electronic access, such as usage charges from Internet access providers and telephone companies, which must be borne by the stockholder.

For Shares Registered in Your Name

Stockholders of record as of the close of business on the Record Date may go to investorvote.com/cytk to vote by proxy their shares by means of the Internet. They will be required to provide our number and control number contained on your Notice. The voter will then be asked to complete an electronic proxy card. The votes represented by such proxy will be generated on the computer screen and the voter will be prompted to submit or revise them as desired. Any stockholder using a touch-tone telephone may also grant a proxy to vote shares by calling 1-800-652-8683 and following the recorded instructions.

For Shares Registered in the Name of a Broker or Bank

Most beneficial owners whose stock is held in street name receive instructions for granting proxies from their banks, brokers or other agents, rather than our proxy card.

A number of brokers and banks are participating in a program provided through Broadridge Financial Solutions that offers the means to grant proxies to vote shares via telephone and the Internet. If your shares are held in an account with a broker or bank participating in the Broadridge Financial Solutions program, you may grant a proxy to vote those shares telephonically by calling the telephone number shown on the instruction form received from your broker or bank, or via the Internet at Broadridge Financial Solutions' web site at proxyvote.com.

General Information for All Shares Voted via the Internet or by Telephone

Votes submitted via the Internet or by telephone must be received by 11:59 p.m., Eastern Time on May 17, 2017. Submitting your proxy via the Internet or by telephone will not affect your right to vote in person should you decide to attend the Annual Meeting.

Quorum; Abstentions; Broker Non-Votes

Votes cast by proxy or in person at the Annual Meeting ("Votes Cast") will be tabulated by the Inspector of Elections (the "Inspector") who is expected to be a representative from Computershare Shareowner Services, our transfer agent and registrar. The Inspector will also determine whether or not a quorum is present. Except in certain specific circumstances, the affirmative vote of a majority of shares present in person or represented by proxy at a duly held meeting at which a quorum is present is required under Delaware law for approval of proposals presented to stockholders. In general, Delaware law provides that a quorum will be present if stockholders holding at least a majority of shares entitled to vote are present in person or represented by proxy at the meeting.

The Inspector will treat shares that are voted WITHHELD or ABSTAIN as being present and entitled to vote for purposes of determining the presence of a quorum. However, such shares will not be treated as votes in favor of approving any matter submitted to the stockholders for a vote. When proxies are properly dated, executed and returned, or if instructions are

INFORMATION CONCERNING SOLICITATION AND VOTING

properly carried out for Internet or telephone voting, the shares represented by such proxies will be voted at the Annual Meeting in accordance with the stockholder's instructions. If no specific instructions are given, the shares will be voted (i) for the election of the nominees for directors set forth herein; (ii) for the ratification of PricewaterhouseCoopers LLP; (iii) for approval of [an amendment to] the A&R 2004 EIP to increase the number of authorized shares reserved for issuance under the A&R 2004 EIP by 3,900,000 shares; (iv) for approval, on an advisory basis, of the compensation of the named executive officers; (v) for approval, on an advisory basis, that the frequency with which the stockholders of the Company wish to have an advisory vote on the compensation of the Company's named executive officers is three years, and (vi) upon such other business as may properly come before the Annual Meeting or any adjournment thereof at the discretion of the proxy holder, but will not be voted in the election of directors other than as provided in (i) above.

If a broker indicates on the proxy or its substitute that such broker does not have discretionary authority as to certain shares to vote on a particular matter ("broker non-votes"), then those shares will be considered as present with respect to establishing a quorum for the transaction of business. Discretionary items are proposals considered routine under the rules of the New York Stock Exchange ("NYSE") on which your broker may vote shares held in street name in the absence of your voting instructions. Non-discretionary items are matters that may substantially affect the rights or privileges of stockholders, such as mergers, stockholder proposals, elections of directors (even if not contested) and executive compensation, including the advisory stockholder votes on executive compensation and on the frequency of stockholder votes on executive compensation. On non-discretionary items for which you do not give your broker instructions, the shares will be treated as broker non-votes. Accordingly, your broker or nominee may not vote your shares on Proposal One without your instructions, but may vote your shares on Proposals Two and Three. We believe that the tabulation procedures to be followed by the Inspector are consistent with the general statutory requirements in Delaware concerning voting of shares and determination of a quorum.

Broker non-votes with respect to proposals set forth in this proxy statement will not be considered "Votes Cast" and, accordingly, will not affect the determination as to whether the requisite number of Votes Cast has been obtained with respect to a particular matter. Abstentions and broker non-votes will be counted towards the quorum requirement. If there is no quorum, a majority of the votes present at the meeting may adjourn the meeting to another date.

Deadline for Receipt of Stockholder Proposals

Stockholders are entitled to present proposals for action at a forthcoming meeting if they comply with the requirements of our bylaws and the rules established by the Securities and Exchange Commission (the "SEC") under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Under these requirements, proposals of our stockholders that are intended to be presented by such stockholders at our 2018 Annual Meeting of Stockholders must be received by us no later than December 1, 2017. Proposals submitted by this date will also be considered for inclusion in next year's proxy materials. If you wish to bring a matter before the shareholders at next year's annual meeting and you do not notify us before February 14, 2018, for all proxies we receive, the proxyholders will have discretionary authority to vote on the matter, including discretionary authority to vote in opposition to the matter. A copy of the relevant bylaws provisions relating to stockholder proposals is available upon written request to Cytokinetics, Incorporated, 280 East Grand Avenue, South San Francisco, California 94080, Attention: Corporate Secretary.

Results of the Voting at the Annual Meeting

Preliminary voting results will be announced at the Annual Meeting. 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 current report on Form 8-K within four business days after the Annual Meeting, we intend to file a current report on Form 8-K to publish preliminary results and, within four business days after the final results are known to us, file an additional current report on Form 8-K to publish the final results.

PROPOSAL ONE
ELECTION OF THREE CLASS I DIRECTORS

Nominees

Our Board of Directors currently has eight members. We have a classified Board of Directors, which is divided into three classes of directors whose terms expire at different times. The three classes are currently comprised of the following directors:

- Class I consists of L. Patrick Gage, Edward M. Kaye and Wendell Wierenga, who will serve until the 2017 Annual Meeting of Stockholders and until their successors have been duly elected and qualified. Dr. Gage, Dr. Kaye and Dr. Wierenga will stand for election as Class I directors at this Annual Meeting;
- Class II consists of Robert I. Blum and Sandford D. Smith, who will serve until the 2018 Annual Meeting of Stockholders; and
- Class III consists of Santo J. Costa, John T. Henderson and B. Lynne Parshall, who will serve until the 2019 Annual Meeting of Stockholders and until their successors have been duly elected and qualified.

At each Annual Meeting of Stockholders, the successors to directors whose terms will then expire will be elected to serve from the time of election and qualification until the third Annual Meeting of Stockholders following such election and until their successors have been duly elected and qualified. Any additional directorships resulting from an increase in the number of directors will be distributed among the three classes so that, as nearly as possible, each class will consist of an equal number of directors.

Unless otherwise instructed, the proxy holders will vote the proxies received by them for our three nominees named below, who are currently directors of the Company who were previously elected by the stockholders, except for Dr. Kaye, who was appointed as a member of the Board of Directors in May 2016 and was recommended for nomination to the Board of Directors by our Nominating and Corporate Governance Committee. The nominees have consented to be named as nominees in the proxy statement and to continue to serve as directors if elected. If any nominee becomes unable or declines to serve as a director or if additional persons are nominated at the meeting, the proxy holders intend to vote all proxies received by them in such a manner as will assure the election of the nominees listed below if possible (or, if new nominees have been designated by the Board of Directors, in such a manner as to elect such nominees), and the specific nominees to be voted for will be determined by the proxy holders.

The nominees for the Class I directors are as follows:

- *L. Patrick Gage*
- *Edward M. Kaye*
- *Wendell Wierenga*

Biographical information for each Class I director can be found below in the Board of Directors section. We are not aware of any reason that any nominee will be unable or will decline to serve as a director. The term of office of each person elected as a Class I director will continue until our 2020 Annual Meeting of Stockholders and until a successor has been elected and qualified. There are no arrangements or understandings between any director or executive officer and any other person pursuant to which he or she is or was to be selected as a director or officer of the Company.

Vote Required

Directors will be elected by a plurality vote of the shares of Common Stock present or represented and entitled to vote on this matter at the Annual Meeting. Accordingly, the candidates receiving the highest number of affirmative votes of shares represented and voting on this proposal at the Annual Meeting will be elected directors of the Company. Votes withheld from a nominee and broker non-votes will be counted for purposes of determining the presence or absence of a quorum but, because directors are elected by a plurality vote, will have no impact once a quorum is present. See "Quorum; Abstentions; Broker Non-Votes."

**THE CLASS II AND III DIRECTORS RECOMMEND THAT
STOCKHOLDERS VOTE FOR THE CLASS I NOMINEES LISTED ABOVE.**

PROPOSAL TWO

RATIFICATION OF SELECTION OF PRICEWATERHOUSECOOPERS LLP AS INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM TO THE COMPANY FOR THE FISCAL YEAR ENDING DECEMBER 31, 2017

The Audit Committee of the Board of Directors has selected PricewaterhouseCoopers LLP, an independent registered public accounting firm, to audit our financial statements for the fiscal year ending December 31, 2017, and recommends that the stockholders vote for ratification of such selection. Although action by stockholders is not required by law, the Board of Directors has determined that it is desirable to request ratification of this selection by the stockholders. Notwithstanding the selection or ratification, the Audit Committee, in its discretion, may direct the selection of a new independent registered public accounting firm at any time during the year, if the Audit Committee determines that such a change would be in our best interest.

Representatives of PricewaterhouseCoopers LLP are expected to be present at the meeting and will be afforded the opportunity to make a statement if they desire to do so, and are expected to be available to respond to appropriate questions.

Principal Accountant Fees and Services

Fees incurred for professional services provided by our independent registered public accounting firm for each of the last two fiscal years were:

	Years Ended December 31,	
	2016	2015
Audit Fees	\$1,069,375	\$842,940
Audit-Related Fees	189,000	—
Tax Fees	—	—
Other Fees	1,800	1,800
	<u>\$1,260,175</u>	<u>\$844,740</u>

PricewaterhouseCoopers LLP served as our independent registered public accounting firm for the years ended December 31, 2016, 2015 and 2014.

For the fiscal years ended December 31, 2016 and 2015, Audit Fees were \$1,069,375 and \$842,940, respectively. The Audit Fees included fees of \$1,003,375 for 2016 and \$842,940 for 2015 associated with the annual audit of our financial statements, Sarbanes-Oxley Act compliance and the interim review of our financial statements included in quarterly reports on Form 10-Q. Audit Fees also include services provided in connection with the issuance of comfort letters, and consents relating to registration statement filings with the SEC and tax provision review. Additionally in 2016, Audit-Related Fees of \$189,000 were billed for services provided in connection with accounting consultation for our partnership and co-investment activities. Other Fees consist of the cost of our subscription to an accounting research tool provided by PricewaterhouseCoopers LLP.

All audit services and non-audit services provided to us by our independent registered public accounting firm are required to be pre-approved by the Audit Committee. The pre-approval of non-audit services to be provided by PricewaterhouseCoopers LLP includes making a determination that the provision of the services is compatible with maintaining the independence of PricewaterhouseCoopers LLP as our independent registered public accounting firm. All services for audit and other fees set forth in the table above were pre-approved by the Audit Committee.

Vote Required

The affirmative vote of the holders of a majority of the shares present in person or represented by proxy and entitled to vote at the Annual Meeting will be required to ratify the selection of PricewaterhouseCoopers LLP. Abstentions will have the same effect as negative votes. Broker non-votes are counted towards a quorum, but are not counted for any purpose in determining whether this matter has been approved.

**THE BOARD OF DIRECTORS RECOMMENDS THAT
STOCKHOLDERS VOTE FOR RATIFICATION OF THE SELECTION BY THE AUDIT
COMMITTEE OF THE BOARD OF DIRECTORS OF
PRICEWATERHOUSECOOPERS LLP AS INDEPENDENT REGISTERED PUBLIC
ACCOUNTING FIRM TO THE COMPANY
FOR THE FISCAL YEAR ENDING DECEMBER 31, 2017.**

PROPOSAL THREE
APPROVAL OF AN AMENDMENT TO THE
AMENDED AND RESTATED 2004 EQUITY INCENTIVE PLAN

We are asking our stockholders to approve the Company's Amended and Restated 2004 Equity Incentive Plan (the "A&R 2004 EIP"), to increase the number of authorized shares of Common Stock reserved for issuance under the A&R 2004 EIP by 3,900,000 shares. The Board of Directors has approved the increase of the authorized share reserve under the A&R 2004 EIP, subject to approval from our stockholders at the Annual Meeting.

The Company's 2004 Equity Incentive Plan (the "2004 EIP") was originally adopted by our Board of Directors in January 2004 and approved by our stockholders in February 2004. Our stockholders approved amendments to the 2004 EIP in May 2008, May 2009, May 2010, May 2011, May 2012 and May 2015. A total of 266,667 shares of our Common Stock were initially authorized for issuance under the 2004 EIP. The authorized amount was thereafter increased: (i) by application of the evergreen provisions of the 2004 EIP, through May 2008; (ii) by shares returned to our 1997 Stock Option/Stock Issuance Plan (the "1997 Plan") that were rolled into the 2004 EIP pursuant to the terms of the 2004 EIP; and (iii) by stockholder approval at each of the Company's annual meetings from May 2008 through May 2015. As of February 28, 2017, a total of 7,737,190 shares of our Common Stock were authorized for issuance under the 2004 EIP.

The Board of Directors believes that this is an appropriate time to update the terms of the A&R 2004 EIP with respect to a number of substantive provisions, and it therefore approved an amendment and restatement of the A&R 2004 EIP. In addition, our Board of Directors believes that the number of shares of our Common Stock that remain available for issuance under the A&R 2004 EIP is insufficient to achieve the purposes of the plan over the term of the plan. Accordingly, the Board of Directors is now requesting that the stockholders approve the A&R 2004 EIP, as well as an increase to the number of authorized shares of Common Stock reserved for issuance under the A&R 2004 EIP of 3,900,000 shares. The Board of Directors has approved this increase to the authorized share reserve, subject to approval from our stockholders at the Annual Meeting. If this Proposal Three is not approved by our stockholders, the A&R 2004 EIP will continue in accordance with its existing terms, and there will be no such increase to the number of shares of Common Stock reserved for issuance under the A&R 2004 EIP.

Amendment to the Amended and Restated 2004 Equity Incentive Plan

The following is a summary of the proposed amendment to the A&R 2004 EIP. This summary is qualified in its entirety by reference to the actual text of the A&R 2004 EIP and the proposed amendment thereto, which is appended to this Proxy Statement as Appendix A.

- We propose to increase the number of authorized shares of our Common Stock reserved for issuance under the A&R 2004 EIP by an additional 3,900,000 shares, from 7,737,190 shares as of February 28, 2017 to 11,637,190 shares, subject to stockholder approval of this amendment.

The Board of Directors believes that the approval of the A&R 2004 EIP is essential to our continued success. We believe that our employees are one of our most valuable assets and that the issuance of awards under the A&R 2004 EIP is a critical factor in our ability to attract and retain outstanding and highly skilled individuals in the extremely competitive labor markets in which we operate. Such awards also are crucial to our ability to motivate our employees to achieve our goals. This Proposal Three is intended to provide sufficient shares to fund anticipated equity awards under the A&R 2004 EIP until our 2018 Annual Meeting of Stockholders. If approved, the number of authorized shares of Common Stock available for issuance under the A&R 2004 EIP, as a percentage of the number of shares of our Common Stock issued and outstanding, would be consistent with those of our Peer Companies (as defined in the Compensation Discussion and Analysis section of this proxy statement). For our Peer Companies, this percentage ranges between 2.4% and 4.5% annually. For the past three years (2014 through 2016) the Company has granted an average of 4.2% annually, based on the number of shares of our Common Stock issued and outstanding. As discussed above, the Board of Directors believes that our ability to issue awards to our employees under the A&R 2004 EIP at a level that is competitive with our Peer Companies is critical to our ability to succeed.

A&R 2004 EIP Outstanding Awards and Available Shares

As of February 28, 2017, a total of 6,048,149 shares of our Common Stock were subject to outstanding stock options awarded under the A&R 2004 EIP. As of such date, these stock option awards had a weighted average exercise price of \$9.47 per share and a weighted average remaining term of 7.14 years. No stock option awards were granted under the A&R 2004 EIP in which the exercise price for the underlying shares was less than the fair market value of such shares on the date of grant. As of February 28, 2017, there were 461,252 unvested restricted stock units outstanding and 800,507 shares available for grant, respectively, under the A&R 2004 EIP.

Summary of the Amended and Restated 2004 Equity Incentive Plan

The following is a summary of the principal features of the A&R 2004 EIP, as approved by the Board of Directors and subject to stockholder approval as described in this Proposal Three. The summary is qualified in its entirety by reference to the A&R 2004 EIP, appended to this Proxy Statement as Appendix A.

The A&R 2004 EIP provides for the grant of the following types of incentive awards: (i) stock options, including incentive stock options and nonstatutory stock options, (ii) stock appreciation rights (“SARs”), (iii) restricted stock, (iv) restricted stock units, (v) performance shares, and (vi) performance units. Each of these is referred to as an “Award.”

Eligibility. Under the A&R 2004 EIP, eligible individuals include employees and consultants who provide services to us as well as members of our Board of Directors. As of February 28, 2017, each of our approximately 136 employees, 34 consultants and each of our 7 non-employee directors will be eligible for Awards under the A&R 2004 EIP.

Number of Shares of Stock Available Under the A&R 2004 EIP. The maximum aggregate number of shares that may be issued under the A&R 2004 EIP, after giving effect to the addition of shares proposed to be added under this Proposal Three, is 11,637,190 shares. During the term of the A&R 2004 EIP, we will at all times reserve and keep available such number of shares of our Common Stock as will be sufficient to satisfy the requirements of the A&R 2004 EIP.

Fungible Ratio. Under the 2004 EIP, shares of stock subject to Awards that are not options or SARs (called “Full Value” Awards) count against the share reserve as two shares for every one share subject to such an Award, and if shares subject to such Full Value Awards are forfeited or repurchased by us and would otherwise return to the 2004 EIP, then two times the number of shares so forfeited or repurchased will become available for future issuance under the 2004 EIP. With respect to Awards granted on and after May 20, 2015 under the A&R 2004 Plan, shares of our Common Stock subject to Full Value Awards will count against the share reserve as 1.17 shares for every one share of stock subject to such an Award, and if shares subject to such Full Value Awards are forfeited or repurchased by us and would otherwise return to the A&R 2004 EIP, as described below, 1.17 times the number of shares of stock so forfeited or repurchased will become available for future issuance under the A&R 2004 EIP.

Return of Shares Subject to an Option or SAR. Shares that have actually been issued under the A&R 2004 EIP under any Award, including an option, will not be returned to the A&R 2004 EIP and will not become available for future issuance under the A&R 2004 EIP. Upon exercise of a SAR settled in shares, the gross number of shares covered by the portion of the SAR so exercised will cease to be available under the A&R 2004 EIP. If the exercise price of an option is paid by a tender to us of shares owned by the participant, the number of shares available for issuance under the A&R 2004 EIP will be reduced by the gross number of shares for which the option is exercised. Shares used to pay the exercise price of an Award and/or used to satisfy tax withholding obligations will not become available for future grant or sale under the A&R 2004 EIP. If an Award that is an option or SAR expires or becomes unexercisable without having been exercised in full, the unpurchased shares which were subject to the Award will become available for future grant or sale under the A&R 2004 EIP.

Return of Shares or Units Subject to Full Value Awards. With respect to Full Value Awards, if shares are repurchased or reacquired by us or units are forfeited by the participant due to failure to vest, the repurchased shares or forfeited units which were subject to the Award will become available for future grant or sale under the A&R 2004 EIP. To the extent an Award is paid out in cash rather than stock, such cash payment will not reduce the number of shares available for issuance under the A&R 2004 EIP.

Maximum Shares Issuable under Incentive Stock Options. The maximum number of shares that may be issued upon the exercise of incentive stock options under the A&R 2004 EIP will be 11,637,190.

If we declare a stock dividend or engage in a reorganization or other change in our capital structure, including in connection with a merger, the Administrator (as defined below) will make appropriate adjustments under the A&R 2004 EIP with respect to (i) the number and class of shares available for issuance, (ii) the number, class and price of shares subject to outstanding Awards, (iii) the maximum number of shares issuable, and (iv) the specified per-person limits on Awards to reflect the change. As of February 28, 2017, the closing price of a share of our Common Stock as reported on the NASDAQ Capital Market was \$10.60.

Administration of the A&R 2004 EIP. The Board of Directors, or a committee of directors or of other individuals satisfying applicable laws and appointed by the Board of Directors (referred to as the “Administrator”), will administer the A&R 2004 EIP. The Board of Directors has delegated administration of the A&R 2004 EIP to the Compensation and Talent Committee of the Board of Directors.

Subject to the terms of the A&R 2004 EIP, the Administrator has broad authority to administer, interpret and construe the A&R 2004 EIP and Awards granted under the A&R 2004 EIP. The Administrator, may, among other things, determine the employees, consultants, and directors who will receive Awards, the numbers and types of Awards to be granted and the terms and conditions of Awards, including the relevant vesting conditions, and in the case of stock options and SARs, the periods of their exercisability. The Administrator may also amend outstanding awards.

The Administrator may, with stockholder approval, implement an exchange program under which (i) outstanding Awards may be surrendered or cancelled in exchange for Awards of the same type, Awards of a different type, or cash; (ii) participants

PROPOSAL THREE

would have the opportunity to transfer any outstanding Awards to a financial institution or other person or entity selected by the Administrator; and/or (iii) the exercise price of an outstanding Award could be reduced. However, subject to certain mandatory adjustment provisions set forth in the A&R 2004 EIP (and described above), the Administrator cannot amend the terms of any Award to reduce the exercise price of such outstanding Award or cancel an outstanding Award in exchange for cash or other Awards with an exercise price that is less than the exercise price of the original Award, without stockholder approval.

All decisions, determinations and interpretations made by the Administrator will be final and binding on all participants and any other holders of Awards.

Options and Stock Appreciation Rights. The Administrator may grant nonstatutory stock options, incentive stock options and SARs under the A&R 2004 EIP. The Administrator determines the number of shares subject to each option or SAR. The aggregate fair market value, determined at the time of grant, of shares of stock with respect to incentive stock options 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 are treated as nonstatutory stock options.

The exercise price of options and SARs granted under the A&R 2004 EIP will be no less than the fair market value of our Common Stock on the date of grant, except that the exercise price of an incentive stock option granted to any participant who owns more than 10% of the total voting power of all classes of our outstanding stock will be at least 110% of the fair market value of the stock on the grant date.

The term of each option or SAR will be set forth in the Award agreement and may not exceed ten years, except that the term of an incentive stock option granted to a participant who owns more than 10% of the total voting power of all classes of our outstanding stock may not exceed five years.

After a participant terminates service with us, the participant may exercise the vested portion of his or her option or SAR for the period of time stated in the Award agreement (not to exceed the original term of the Award). If no such period of time is stated in the participant's Award agreement, the participant (or, if applicable, the participant's estate) generally may exercise the option or SAR for (i) three months following the participant's termination for reasons other than death or disability, and (ii) twelve months following the participant's termination due to death or disability.

The Administrator determines the form of payment it will accept when a participant exercises an option or SAR, which may include (i) cash, (ii) check, (iii) other shares of stock (provided that such shares have a fair market value on the date of surrender equal to the aggregate exercise price of the shares as to which the option or SAR will be exercised and that the acceptance of such shares, as determined by the Administrator, will not result in adverse accounting consequences to the Company), (iv) consideration received by us under a cashless exercise program implemented by us, (v) other consideration and methods of payment permitted by applicable laws, or (vi) any combination of the foregoing methods of payment.

Unless otherwise stated in the applicable Award Agreement, an individual holding or exercising an Option or SAR shall have none of the rights of a stockholder (for example, the right to receive cash or dividend payments or distributions attributable to the subject Shares or to direct the voting of the subject Shares) until the shares covered thereby are fully paid and issued to him. In no case shall an individual holding an Option receive cash or dividend payments or distributions or dividend equivalents attributable to unvested Shares underlying an Option.

Restricted Stock. An Award of restricted stock is an issuance of shares of our Common Stock, subject to restrictions that lapse (or vest) based upon the satisfaction of the applicable terms and conditions (including vesting) established by the Administrator in its sole discretion. The Administrator will determine the number of shares granted pursuant to an Award of restricted stock. The Administrator, in its discretion, may accelerate the time at which any restrictions will lapse or be removed. The Award agreement generally will grant us a right to repurchase or reacquire the shares upon the termination of the participant's service with us for any reason, including death or disability. On the date set forth in the Award agreement, all unvested restricted stock will be forfeited to us. Any dividends declared with respect to shares of our Common Stock subject to an Award of restricted stock shall be paid to participants only after the underlying restricted stock has vested or has been earned and not during the performance or service vesting period.

Restricted Stock Units. An Award of restricted stock unit represents the right, subject to certain terms and conditions, to be issued one share of stock for each unit that vests or otherwise satisfies applicable performance conditions. Each Award of restricted stock units will be evidenced by an Award agreement that will set forth the terms and conditions of the Award. The Administrator may establish service-based or other vesting criteria (including performance-based vesting criteria) in its discretion, which, depending on the extent to which such criteria are met, will determine the number of restricted stock units to be paid to participants. The restricted stock units will vest at a rate determined by the Administrator; provided, however, that after the grant of the restricted stock units, the Administrator, in its sole discretion, may reduce or waive any vesting provisions for such restricted stock units. Vested restricted stock units will be settled in shares of our Common Stock as soon as administratively practicable following the date on which such restricted stock units vest. On the date set forth in the Award agreement, all unvested restricted stock units will be forfeited to us. No dividends or dividend equivalent rights will be paid to participants unless and until the underlying Award of restricted stock unit has vested.

Performance Shares and Performance Units. Performance shares and performance units are Awards under which the release of shares or vesting of units requires the achievement of performance goals or objectives or other conditions established by the Administrator. The Administrator will determine the number of performance shares or performance units to be granted to a participant. Each Award of performance units or performance shares will be evidenced by an Award agreement and will specify the performance period and such other terms and conditions as determined by the Administrator, including the rate at which the shares or units will vest. After the applicable performance period has ended, any performance shares or performance units earned or vested will be paid, in the Administrator's sole discretion, in the form of cash, shares of our Common Stock, or in a combination thereof. The extent to which the performance objectives are met will determine the number and/or the value of performance units and performance shares to be paid out to participants, however, the Administrator may reduce or waive any performance objectives or other vesting provisions for such performance unit or performance share, in its sole discretion. On the date set forth in the Award agreement, all unearned or unvested performance units and performance shares will be forfeited to us. No cash dividends or distributions declared with respect to shares of our Common Stock subject to the performance shares or performance units shall be paid to any participant unless and until the participant vests in such underlying performance shares or performance units. Any stock dividends declared on shares of our Common Stock that are subject to a performance share or performance unit will be subject to the same restrictions and will vest at the same time as the performance shares and performance units from which said dividends were derived. All unvested dividends will be forfeited by the participants to the extent their underlying performance shares or performance units are forfeited.

Performance-Based Awards under Section 162(m) of the Code

The A&R 2004 EIP allows us to grant Awards that may qualify as "performance-based compensation," so that the value of such Awards is not subject to the \$1 million limitation on deductibility of compensation paid to a "covered employee" under Section 162(m) of the Code. "Covered employees" are generally the chief executive officer and the top three most highly compensated officers other than the chief financial officer. While we believe it is in the best interests of the Company and our stockholders to preserve the ability to grant "performance-based compensation" under Section 162(m) of the Code, in certain circumstances, we may determine to grant compensation to covered employees that will not qualify as "performance-based compensation" for purposes of Section 162(m) of the Code. Moreover, even if we intend to grant compensation that qualifies as "performance-based compensation," we cannot guarantee that such compensation ultimately will be deductible by us.

For the grant of awards under a plan to qualify as "performance-based compensation" under Section 162(m) of the Code, among other things, the plan must (1) describe the employees eligible to receive such awards, (2) provide a per-person limit on the number of shares subject to stock options and performance stock awards, granted to any employee under the plan in any year, and (3) include one or more pre-established business criteria upon which the performance goals for performance awards may be granted (or become vested and/or exercisable). These terms must be approved by our stockholders and, accordingly, we are requesting our stockholders to approve the A&R 2004 EIP, which includes terms regarding eligibility for awards, per-person limits on awards and the business criteria for performance awards granted under the A&R 2004 EIP (as described in the summary below).

Under the A&R 2004 EIP, Awards may be subject to one or more of the following performance goals, either alone or in combination (collectively, the "Performance Goals"): (a) cash position, (b) clinical progression, (c) collaboration arrangements, (d) collaboration progression, (e) earnings per share, (f) a financing event, (g) net income, (h) operating cash flow, (i) market share, (j) operating expenses, (k) operating income, (l) product approval, (m) product revenues, (n) profit after tax, (o) projects in development, (p) regulatory filings, (q) return on assets, (r) return on equity, (s) revenue growth, and (t) total stockholder return, (u) implementation of, progression in or completion of projects or processes (including, without limitation, progress in research or development programs, progress in regulatory or compliance initiatives, clinical trial initiation, clinical trial enrollment, clinical trial results, new or supplemental indications for existing products, regulatory filing submissions, regulatory filing acceptances, regulatory or advisory committee interactions, regulatory approvals, product supply and systems development and implementation), (v) completion of a joint venture or other corporate transaction, (w) employee retention, (x) budget management and (y) to the extent that an Award is not intended to comply with Section 162(m) of the Code, other measures of performance selected by the Board of Directors. Any Performance Goals may be used to measure the performance of the Company as a whole, a business or divisional unit of the Company, or with respect to an individual participant's performance. In addition, Performance Goals may be measured relative to a peer group or index or to another Performance Goal, and the Performance Goals may differ from one participant to the next and from one Award to the next.

Prior to the date that will not jeopardize qualification of an Award intended to qualify as "performance-based compensation" under Section 162(m) of the Code, the Administrator will determine whether any significant element(s) will be included in or excluded from the calculation of any Performance Goal with respect to any participant. In all other respects, Performance Goals will be calculated in accordance with the Company's financial statements, generally accepted accounting principles, or under a methodology established by the Administrator prior to the issuance of an Award, which is consistently applied and identified in the financial statements, including footnotes, or the management discussion and analysis of the Company's annual report.

PROPOSAL THREE

Under the A&R 2004 EIP, for Awards that are intended to qualify as “performance-based compensation” under Section 162(m) of the Code, no participant will receive an Award of options or SARs covering more than 500,000 shares of stock. With respect to Awards of performance shares or performance units that are intended to qualify as “performance-based compensation” under Section 162(m) of the Code, no participant will receive an Award of more than 500,000 performance shares (or the equivalent in performance units).

Transferability of Awards. Awards are generally not transferable, and all rights with respect to an Award granted to a participant generally will be available during a participant’s lifetime only to the participant. The Administrator, however, may make an Award transferable to certain family members, trusts or related business entities of the participant, or to organizations as charitable donations.

Change in Control. In the event of a change in control of the Company (as defined in the A&R 2004 EIP and described below), each outstanding Award will be assumed or an equivalent option or right substituted by the successor corporation or a parent or subsidiary of the successor corporation. If the successor corporation refuses to assume or substitute for the Award, then: (i) the participant will fully vest in, and have the right to exercise, all of his or her outstanding options and SARs, including shares as to which such Awards would not otherwise be vested or exercisable; (ii) all restrictions on restricted stock will lapse; and, (iii) with respect to performance shares, performance units and restricted stock units, all performance goals or other vesting criteria will be deemed achieved at target levels and all other terms and conditions met. In addition, if an option or SAR is not assumed or substituted for in the event of a change in control, the Administrator will notify the participant that the option or SAR will be fully vested and exercisable for a period of time prior to the change in control determined by the Administrator in its sole discretion, and the option or SAR will terminate upon the expiration of such period.

With respect to Awards granted to a non-employee director of the Company that are assumed or substituted for, if on the date of or following such assumption or substitution the participant’s status as a director or a director of the successor corporation, as applicable, is terminated other than upon a voluntary resignation by the participant not at the request of the successor, then: (i) the participant will fully vest in, and have the right to exercise, his or her options and SARs as to all of the shares subject to the Award; (ii) all restrictions on restricted stock shall lapse; and, (iii) with respect to performance shares, performance units and restricted stock units, all performance goals or other vesting criteria will be deemed achieved at target levels and all other terms and conditions met.

For purposes of the A&R 2004 EIP, a change in control generally means the occurrence of any of the following events: (i) any “person” (as defined in Sections 13(d) and 14(d) of the Exchange Act) becomes the “beneficial owner” (as defined in Rule 13d-3 of the Exchange Act), directly or indirectly, of securities of the Company representing 50% or more of the total voting power of our then outstanding voting securities; (ii) consummation of the sale or disposition by us of all or substantially all of our assets; (iii) a change in the composition of the Board of Directors occurring within a two-year period, as a result of which fewer than a majority of the directors are “incumbent directors” (as defined in the A&R 2004 EIP); or (iv) consummation of a merger or consolidation of the Company with any other corporation, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent at least 50% of the total voting power represented by the voting securities of the Company or such surviving entity or its parent outstanding immediately after such merger or consolidation.

Amendment and Termination of the A&R 2004 EIP. The Administrator has the authority to amend, alter, suspend or terminate the A&R 2004 EIP at any time, except that stockholder approval will be required for any amendment to the A&R 2004 EIP to the extent required by applicable laws. No amendment, alteration, suspension or termination of the A&R 2004 EIP will impair the rights of any participant without his or her consent. The A&R 2004 EIP will terminate on May 20, 2025 unless the Administrator terminates it earlier.

New Plan Benefits

Awards that an employee, director or consultant may receive under the A&R 2004 EIP are granted in the Administrator’s discretion and are not subject to set benefits or amounts, and we have not approved any Awards that are conditioned on stockholder approval of the A&R 2004 EIP. Therefore, we cannot currently determine the benefits, amounts or number of shares subject to Awards that may be granted in the future to our executive officers and other employees, directors or consultants under the A&R 2004 EIP. For information on the number of shares subject to awards granted under the 2004 EIP during 2016 for our named executive officers, see the “Grants of Plan Based Awards Table in 2016” later in this proxy statement. The total number of shares subject to awards granted in fiscal 2016 under the 2004 EIP was 1,493,675.

Federal Income Tax Consequences

The following is a summary of the principal United States federal income taxation consequences to participants and us with respect to participation in the A&R 2004 EIP. 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 his or her tax adviser regarding the federal, state, local, and other tax consequences of the grant or exercise of an Award or the disposition of shares of stock acquired under the A&R 2004 EIP. The A&R 2004 EIP is not qualified under the provisions of Section 401(a) of the Code and is not subject to any of the provisions of the Employee Retirement Income Security Act of 1974, as amended. 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, the provisions of Section 162(m) of the Code and the satisfaction of our tax reporting obligations.

Nonstatutory Stock Options. No taxable income is reportable when a nonstatutory stock option is granted to a participant. Upon exercise, the participant will recognize ordinary income in an amount equal to the excess of the fair market value (on the exercise date) of the shares purchased over the exercise price of the option. Any taxable income recognized in connection with an option exercise by an employee of the Company is subject to tax withholding by us. Any gain or loss recognized upon any later disposition of the shares would be capital gain or loss.

Incentive Stock Options. No taxable income is reportable when an incentive stock option is granted or exercised (except for purposes of the participant's alternative minimum tax at exercise, if any, in which case the amount of tax is the same as for nonstatutory stock options). If the participant exercises the option and then later sells or otherwise disposes of the shares more than two years after the grant date and more than one year after the exercise date, the difference between the sale price and the exercise price will be taxed as capital gain or loss. If the participant exercises the option and then later sells or otherwise disposes of the shares before the end of the two- or one-year holding periods described above, he or she generally will have ordinary income at the time of the sale equal to the fair market value of the shares on the exercise date (or the sale price, if less) minus the exercise price of the option.

Stock Appreciation Rights. No taxable income is reportable when a SAR is granted to a participant. Upon exercise, the participant will recognize ordinary income in an amount equal to the amount of cash received and/or the fair market value of any shares received. Any gain or loss recognized upon any later disposition of the shares would be capital gain or loss.

Restricted Stock and Performance Shares. A participant generally will not have taxable income at the time an Award of restricted stock or performance shares are granted. Instead, he or she will recognize ordinary income in the first taxable year in which his or her interest in the shares underlying the Award becomes either (i) freely transferable, or (ii) no longer subject to substantial risk of forfeiture. However, the recipient of a restricted stock Award may elect, under Section 83(b) of the Code, to recognize income at the time he or she receives the Award in an amount equal to the fair market value of the shares underlying the Award (less any cash paid for the shares) on the date the Award is granted.

Restricted Stock Units and Performance Units. A participant generally will not have taxable income at the time restricted stock units or performance units are granted. Instead, he or she will recognize ordinary income upon distribution of shares with respect to a restricted stock unit in an amount equal to the fair market value of those shares. Any gain or loss recognized upon any other disposition of the shares would be capital gain or loss.

Section 409A. If an Award is subject to and fails to satisfy the requirements of Section 409A of the Code the participant may recognize ordinary income on the amounts deferred under the Award, to the extent vested, which may be prior to when the compensation is actually or constructively received. Also, if an Award that is subject to Section 409A of the Code fails to comply with the provisions of Section 409A of the Code, Section 409A of the Code imposes an additional 20% federal income tax on compensation recognized as ordinary income, as well as interest on such deferred compensation. Some states may also apply a penalty tax (for instance, California imposes a 20% penalty tax in addition to the 20% federal penalty tax).

Tax Effect for the Company; Section 162(m). We generally will be entitled to a tax deduction in connection with an Award under the A&R 2004 EIP in an amount equal to the ordinary income realized by a participant and at the time the participant recognizes such income (for example, upon exercise of a nonstatutory stock option), provided that we satisfy certain tax withholding requirements applicable to such income. Section 162(m) of the Code limits the deductibility of compensation paid to our Chief Executive Officer (i.e., our principal executive officer) and to each of our three most highly compensated executive officers for the taxable year (other than the principal financial officer). As discussed above, the A&R 2004 EIP has been designed to permit the Administrator to grant Awards that are intended to qualify as performance-based compensation within the meaning of Section 162(m) of the Code for purposes of satisfying the exemption from these deduction limits, but not all Awards may so qualify, and the Administrator retains full discretion to grant Awards that are not intended to so qualify.

THE FOREGOING IS ONLY A SUMMARY OF THE EFFECT OF FEDERAL INCOME TAXATION UPON PARTICIPANTS AND THE COMPANY WITH RESPECT TO THE GRANT AND EXERCISE OF AWARDS UNDER THE A&R 2004 EIP. IT DOES NOT PURPORT TO BE COMPLETE, AND DOES NOT DISCUSS THE TAX CONSEQUENCES OF A PARTICIPANT'S DEATH OR THE PROVISIONS OF THE INCOME TAX LAWS OF ANY MUNICIPALITY, STATE OR FOREIGN COUNTRY IN WHICH THE PARTICIPANT MAY RESIDE.

PROPOSAL THREE

Vote Required and Board of Directors Recommendation

The approval of the amendment to the A&R 2004 EIP requires the affirmative vote of a majority of the shares present in person or represented by proxy at the Annual Meeting. Abstentions will have the same effect as negative votes. Broker non-votes are counted towards a quorum, but are not counted for any purpose in determining whether this matter has been approved. The A&R 2004 EIP will not become effective if our stockholders do not vote FOR its approval.

THE BOARD OF DIRECTORS RECOMMENDS THAT STOCKHOLDERS VOTE FOR APPROVAL OF THE AMENDMENT TO THE AMENDED AND RESTATED 2004 EQUITY INCENTIVE PLAN (THE "A&R 2004 EIP") TO INCREASE THE NUMBER OF AUTHORIZED SHARES RESERVED FOR ISSUANCE UNDER THE A&R 2004 EIP BY 3,900,000 SHARES.

PROPOSAL FOUR
ADVISORY VOTE ON EXECUTIVE COMPENSATION

At the 2011 Annual Meeting of Stockholders, our stockholders indicated their preference that the Company solicit an advisory (nonbinding) vote on the compensation of our named executive officers commonly referred to as a “say on pay” vote, every three years. Our Board of Directors has adopted a policy that is consistent with that preference. In accordance with that policy, we are seeking the stockholders’ approval, on an advisory basis, of the compensation of our named executive officers as disclosed pursuant to the SEC’s compensation disclosure rules (which disclosure includes the Compensation Discussion and Analysis, the related compensation tables and the narrative disclosure to those tables, on pages 27 to 36 in this proxy statement).

The Compensation and Talent Committee, which is responsible for designing and administering the Company’s executive compensation program, has designed our executive compensation program to provide a competitive and internally equitable compensation and benefits package that reflects Company performance, job complexity, and strategic value of the position while seeking to ensure the individual’s long-term retention and motivation and alignment with the long-term interests of the Company’s stockholders. We believe the compensation program for our named executive officers has been instrumental in helping the Company retain an executive team capable of managing the Company through the challenging business and economic environment over the past several years and enabling the Company to advance its research and development programs, including its clinical development programs. We encourage you to carefully review the section entitled “Compensation Discussion and Analysis” of this proxy statement for additional details on the Company’s executive compensation, including our compensation philosophy and objectives, as well as the reasons and processes for how our Compensation and Talent Committee determined the structure and amounts of the 2016 compensation of our named executive officers.

We are asking our stockholders to indicate their support for our named executive officer compensation as described in this proxy statement. This vote is not intended to address any specific item of compensation, but rather the overall 2016 compensation of our named executive officers (including the philosophy, policies and practices for setting such compensation) described in this proxy statement. Accordingly, we are asking our stockholders to vote “FOR” the following resolution at the Annual Meeting:

“RESOLVED, that the Company’s stockholders approve, on an advisory basis, the compensation of the Named Executive Officers, as disclosed in the Company’s proxy statement for the 2017 Annual Meeting of Stockholders pursuant to the compensation disclosure rules of the SEC, including the Compensation Discussion and Analysis, the related compensation tables and the narrative disclosure to those tables in the proxy statement.”

Vote Required

Adoption of this resolution will require the affirmative vote of the majority of the shares of Common Stock represented in person or by proxy and entitled to vote at the Annual Meeting. Abstentions will have the same effect as negative votes. Broker non-votes are counted towards a quorum, but are not counted for any purpose in determining whether this matter has been approved.

The results of this advisory vote are not binding upon the Company. However, the Compensation and Talent Committee values the opinions expressed by stockholders in their vote, and will consider the outcome of the vote in deciding whether any actions are necessary to address concerns raised by the vote and when making future compensation decisions for named executive officers. Unless the Board of Directors decides to modify its policy regarding the frequency of soliciting advisory votes on the compensation of our named executive officers, the next scheduled “say on pay” vote will be at our 2020 Annual Meeting of Stockholders.

**THE BOARD OF DIRECTORS RECOMMENDS THAT STOCKHOLDERS VOTE
FOR THE ADVISORY PROPOSAL ON EXECUTIVE COMPENSATION**

PROPOSAL FIVE
ADVISORY VOTE ON FREQUENCY OF “SAY ON PAY” PROPOSAL

Consistent with the requirements of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, the Board of Directors is providing the Company’s stockholders with the opportunity to cast an advisory vote on how often the Company should submit a “say on pay” proposal, as provided for in Proposal Four, to stockholders. Currently, consistent with the preference expressed by stockholders at the 2011 Annual Meeting of Stockholders, the policy of the Board of Directors is to solicit a “say on pay” advisory vote every three years. Accordingly, we are again providing stockholders with the following choices: the choice of whether the “say on pay” advisory vote should be submitted to the stockholders annually, every two years, or every three years, or the choice to abstain from voting.

The Board of Directors believes that the “say on pay” advisory vote should be submitted to the stockholders once every three years, and therefore the Board of Directors recommends that you vote for a three-year interval for the advisory vote on executive compensation, for the following reasons:

- A triennial approach provides regular input by stockholders, while allowing stockholders to better judge our compensation programs in relation to our long-term performance. This benefits our institutional and other stockholders, who have historically held our stock over the long-term.
- Our executive compensation program is designed to operate over the long-term and is designed to support long-term value creation. Equity awards, mainly in the form of stock options, have historically represented a substantial portion of our executives’ compensation. Stock options provide significant leverage if our long-term growth objectives are achieved, while placing a significant portion of our executives’ compensation at risk if our long-term objectives are not achieved.
- A triennial vote will provide our Compensation and Talent Committee and our Board of Directors sufficient time to thoughtfully evaluate the results of the most recent advisory vote on executive compensation, discuss the implications of the vote with our stockholders and develop and implement any changes to our executive compensation program that may be appropriate in light of the vote. A triennial vote will also allow for these changes to our executive compensation program to be in place long enough for stockholders to see and evaluate the effectiveness of these changes.
- The composition and level of compensation paid to executives in the market evolves over multiple years. A triennial approach will allow us to review evolving practices in the market to ensure our compensation programs reflect best practices.

We understand that our stockholders may have different views as to what is the best approach for the Board of Directors, and we look forward to hearing from our stockholders on this Proposal.

You may cast your vote on your preferred voting frequency by choosing the option of one year, two years, three years or abstain from voting when you vote in response to the resolution set forth below.

“RESOLVED, that the stockholders of the Company determine, on an advisory basis, that the frequency with which the stockholders of the Company wish to have an advisory vote on the compensation of the Company’s named executive officers as disclosed pursuant to the SEC’s compensation disclosure rules (which disclosure includes the Compensation Discussion and Analysis, the Summary Compensation Table, and the related tables and disclosure) is:

Choice 1 — every three years;

Choice 2 — every two years;

Choice 3 — every year; or

Choice 4 — abstain from voting.”

Abstentions will not be counted as either votes cast for or against the Proposal.

Vote Required

Stockholders are not voting to approve or disapprove the Board of Directors’ recommendation. Stockholders may choose among the four choices included in the resolution above. While this is an advisory vote and, therefore, non-binding, the Board of Directors will give careful consideration to the choice which receives the most “FOR” votes before determining the action the Board deems most appropriate for the Company and its stockholders.

**THE BOARD OF DIRECTORS RECOMMENDS THAT YOU SELECT “EVERY THREE YEARS” AS
THE FREQUENCY WITH WHICH THE COMPANY SHOULD PROVIDE ITS STOCKHOLDERS
WITH THE OPPORTUNITY TO CAST A “SAY ON PAY” ADVISORY VOTE.**

FORWARD-LOOKING STATEMENTS

This proxy statement, including the section entitled “Compensation Discussion and Analysis” set forth below, contains “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended, Section 21E of the Exchange Act and the Private Securities Litigation Reform Act of 1995. These statements are based on our current expectations and involve risks and uncertainties, which may cause results to differ materially from those set forth in the statements. These forward-looking statements reflect management’s current expectations concerning future results and events and can generally be identified by the use of words such as “may,” “will,” “should,” “could,” “would,” “likely,” “potential,” “continue,” “future,” “estimate,” “believe,” “expect,” “anticipate,” “assume,” “intend,” “plan,” and other similar words or phrases, as well as statements in the future tense. Without limiting the generality of the foregoing, forward-looking statements contained in this proxy statement include statements relating to compensation plans, strategies, objectives and our anticipated financial and operational performance. Except as required by law, we undertake no obligation to publicly update any forward-looking statement, whether as a result of new information, future events or otherwise. Forward-looking statements should be evaluated together with the many risks and uncertainties that affect our business, including those set forth in the risk factors in Item 1A of our Annual Report on Form 10-K for the fiscal year ended December 31, 2016, as filed with the SEC.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth, as of February 28, 2017, certain information with respect to the beneficial ownership of Common Stock by:

- any person (including any group as that term is used in Section 13(d)(3) of the Exchange Act), known by us to be the beneficial owner of more than 5% of our voting securities,
- each director and each nominee for director to the Company,
- each of the executive officers named in the Summary Compensation Table appearing herein, and
- all such executive officers, directors and nominees for director of the Company as a group.

The number and percentage of shares beneficially owned are based on the aggregate of 41,754,123 shares of Common Stock outstanding as of February 28, 2017, adjusted as required by the rules promulgated by the SEC. We do not know of any arrangements, including any pledge by any person of our securities, the operation of which may at a subsequent date result in a change of control of the Company.

Name and Address of Beneficial Owner	Number of Shares	Percent of Common Stock Outstanding
5% Stockholders:		
Entities affiliated with FMR, LLC ⁽¹⁾ 245 Summer Street Boston, MA 02210	6,249,914	14.6%
Entities affiliated with BVF Partners L.P. ⁽²⁾ 1 Sansome Street, 30 th Floor San Francisco, California 94104	5,772,743	13.5%
Eastern Capital Limited. ⁽³⁾ 10 Market Street, #773 Grand Cayman KY1-9006, Cayman Islands	3,607,529	8.5%
Entities affiliated with BlackRock, Inc. ⁽⁴⁾ 55 East 52 nd Street New York, NY 10055	2,998,800	7.2%
Entities affiliated with Lansdowne Partners Limited Partnership ⁽⁵⁾ 15 Davies Street London W1K 3AG England	2,848,181	6.7%
Named Executive Officers:		
Robert I. Blum ⁽⁶⁾	902,301	2.1%
Sharon A. Barbari ⁽⁷⁾	353,107	*
Fady I. Malik, M.D., Ph.D. ⁽⁸⁾	321,000	*
Bradley P. Morgan, Ph.D. ⁽⁹⁾	173,705	*
Andrew A. Wolff, M.D., F.A.C.C. ⁽¹⁰⁾	234,332	*
Non-Employee Directors:		
Santo J. Costa ⁽¹¹⁾	66,664	*
L. Patrick Gage, Ph.D. ⁽¹²⁾	199,526	*
John T. Henderson, M.B., Ch.B. ⁽¹³⁾	147,192	*
Edward Kaye ⁽¹⁴⁾	17,885	*
B. Lynne Parshall, Esq. ⁽¹⁵⁾	83,458	*
Sandford D. Smith ⁽¹⁶⁾	94,780	*
Wendell Wierenga, Ph.D. ⁽¹⁷⁾	91,003	*
All directors and executive officers as a group (16 persons)	3,204,263	7.2%

* Represents beneficial ownership of less than one percent (1%) of the outstanding shares of Common Stock.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

- (1) Based on a Schedule 13G filed with the SEC on February 13, 2017 which reflected 5,199,414 shares of Common Stock held by FMR LLC; in addition to 1,050,500 shares of Common Stock underlying warrants exercisable as of February 28, 2017.
- (2) Based on a Schedule 13G filed with the SEC on February 14, 2017 which reflected 4,851,691 shares of Common Stock held by BVF Partners L.P. and its Affiliates and 921,052 shares of Common Stock underlying warrants exercisable as of February 28, 2017.
- (3) Based on a Schedule 13G filed with the SEC on February 13, 2015 which reflected 3,607,529 shares of Common Stock held by Eastern Capital Limited and includes 723,684 shares of Common Stock underlying warrants exercisable as of February 28, 2017.
- (4) Based on a Schedule 13G filed with the SEC on January 23, 2017.
- (5) Based on a Schedule 13G filed with the SEC on February 12, 2016 which reflected 2,321,865 shares of Common Stock held by Lansdowne Partners (UK) LLP; in addition to 526,316 shares of Common Stock underlying warrants exercisable as of February 28, 2017.
- (6) Represents: (a) 93,768 shares of Common Stock held by Mr. Blum; (b) 2,083 shares of Common Stock held by the Brittany Blum 2003 Irrevocable Trust; (c) 2,083 shares of Common Stock held by the Bridget Blum 2003 Irrevocable Trust; and (d) 804,367 shares of Common Stock underlying options granted to Mr. Blum that are exercisable within 60 days of February 28, 2017. Mr. Blum disclaims beneficial ownership of the shares of Common Stock held by the trusts.
- (7) Represents: (a) 40,323 shares of Common Stock held by the Barbari Family Trust; and (b) 312,784 shares of Common Stock underlying options granted to Ms. Barbari that are exercisable within 60 days of February 28, 2017.
- (8) Represents: (a) 45,404 shares of Common Stock held by Dr. Malik; and (b) 275,596 shares of Common Stock underlying options granted to Dr. Malik that are exercisable within 60 days of February 28, 2017.
- (9) Represents: (a) 45,194 shares of Common Stock held by Dr. Morgan; and (b) 128,511 shares of Common Stock underlying options granted to Dr. Morgan that are exercisable within 60 days of February 28, 2017.
- (10) Represents: (a) 47,255 shares of Common Stock held by Dr. Wolff; and (b) 187,077 shares of Common Stock underlying options granted to Dr. Wolff that are exercisable within 60 days of February 28, 2017.
- (11) Represents: 66,664 shares of Common Stock underlying options granted to Mr. Costa that are exercisable within 60 days of February 28, 2017.
- (12) Represents (a) 30,000 shares of Common Stock held by Dr. Gage; (b) 1,850 shares held by Dr. Gage's spouse; and (c) 167,676 shares of Common Stock underlying options granted to Dr. Gage that are exercisable within 60 days of February 28, 2017.
- (13) Represents (a) 250 shares of Common Stock held by Dr. Henderson; (b) 83 shares held by Dr. Henderson's spouse; and (c) 146,859 shares of Common Stock underlying options granted to Dr. Henderson that are exercisable within 60 days of February 28, 2017. Dr. Henderson disclaims beneficial ownership of the shares of Common Stock held by his spouse.
- (14) Represents: 17,885 shares of Common Stock underlying options granted to Dr. Kaye that are exercisable within 60 days of February 28, 2017.
- (15) Represents: 83,458 shares of Common Stock underlying options granted to Ms. Parshall that are exercisable within 60 days of February 28, 2017.
- (16) Represents: 94,780 shares of Common Stock underlying options granted to Mr. Smith that are exercisable within 60 days of February 28, 2017.
- (17) Represents: 91,003 shares of Common Stock underlying options granted to Dr. Wierenga that are exercisable within 60 days of February 28, 2017.

Except as otherwise noted above, the address of each person listed on the table is c/o Cytokinetics, Incorporated, 280 East Grand Avenue, South San Francisco, CA 94080.

We do not have a policy for stock ownership guidelines for members of the Board of Directors or executive officers.

BOARD OF DIRECTORS

Our Board of Directors is composed of individuals whose knowledge, background, experience and judgment we believe to be valuable to the Company. The primary functions of our Board of Directors are to:

- Review and approve our strategic direction and annual operating plan and monitor our performance;
- Evaluate the President and Chief Executive Officer;
- Review management performance and compensation;
- Review management succession planning;
- Advise and counsel management;
- Monitor and manage potential conflicts of interests of management, board members and stockholders;
- Oversee the integrity of financial information; and
- Monitor the effectiveness of the governance practices under which the Board of Directors operates and make changes as needed.

We do not have a formal diversity policy for selecting Board of Directors members. However, we believe it is important that the members of our Board of Directors collectively bring the experiences and skills appropriate to effectively carry out the Board of Directors' responsibilities both as our business exists today and as we plan to develop an organization capable of successfully conducting late-stage clinical development and commercialization of our products. We therefore seek as members of our Board of Directors individuals with a variety of perspectives and the expertise and ability to provide advice and oversight in one or more of these areas: accounting controls, business strategy, risk management, strategic partnering, financial engineering, legal and regulatory compliance and compensation and retention practices.

The following table sets forth in alphabetical order the names of each member of our Board of Directors, their age, position, director class and committee membership as of March 31, 2017.

Director	Age	Position/Class	Audit Committee	Compensation and Talent Committee	Nominating and Governance Committee	Science & Technology Committee
Robert I. Blum	53	CEO, Class II				
Santo J. Costa	71	Class III		Chair	✓	
L. Patrick Gage, Ph.D.	74	Chairman, Class I		✓	Chair	✓
John Henderson, M.B., Ch.B.	72	Class III	✓		✓	✓
Edward M. Kaye, M.D.	68	Class I				✓
B. Lynne Parshall, Esq.*	63	Class III	Chair		✓	
Sandford D. Smith	70	Class II	✓	✓		
Wendell Wierenga, Ph.D	69	Class I		✓		Chair
Number of Committee Meetings Held in 2016			9	6	5	4

* Financial Expert

Director Skills, Experience and Background

Robert I. Blum was appointed as our President and Chief Executive Officer and as a member of our Board of Directors in January 2007. Previous to that appointment, Mr. Blum served as our President from February 2006 to January 2007. He served as our Executive Vice President, Corporate Development and Commercial Operations and Chief Business Officer from September 2004 to February 2006. From January 2004 to September 2004, he served as our Executive Vice President, Corporate Development and Finance and Chief Financial Officer. From October 2001 to December 2003, he served as our Senior Vice President, Corporate Development and Finance and Chief Financial Officer. From July 1998 to September 2001, Mr. Blum was our Vice President, Business Development. Prior to joining us in July 1998, he was Director, Marketing at COR Therapeutics, Inc. since 1996. From 1991 to 1996, he was Director, Business Development at COR Therapeutics. Prior to that, Mr. Blum performed roles of increasing responsibility in sales, marketing and other pharmaceutical business functions at Marion Laboratories, Inc. and Syntex Corporation. Mr. Blum received B.A. degrees in Human Biology and Economics from Stanford University and an M.B.A. from Harvard Business School.

Mr. Blum brings to our Board of Directors a deep familiarity with our operations, strategy and vision, as well as a record of successful corporate management, strategic partnering and financing.

Santo J. Costa has served as a member of our Board of Directors since November 2010. Since 2007, Mr. Costa has served as Of Counsel to the law firm of Smith, Anderson, Blount, Dorsett, Mitchell and Jernigan, L.L.P. of Raleigh, North Carolina, specializing in corporate law for healthcare companies. From 1994 to 2001, he held various positions at Quintiles Transnational Corporation, including as Vice Chairman, President and Chief Operating Officer. Prior to joining Quintiles, Mr. Costa spent 23 years in the pharmaceutical industry, most recently as General Counsel and Senior Vice President, Administration with Glaxo Inc. Prior to joining Glaxo, he served as U.S. Area Counsel with Merrell Dow Pharmaceuticals and as Food & Drug Counsel with Norwich Eaton Pharmaceuticals, Inc. Mr. Costa has served as Chairman of the Board of Alchemia Limited, a biopharmaceutical company, from March 2014 to June 2015. He served on the Board of Directors of Magor Corporation, formerly Biovest Corp. I, from March 2010 until March 2013. He served as Chairman of the Board of LaboPharm, Inc. from 2006 to 2011 and a director of OSI Pharmaceuticals from 2006 to 2010, as well as serving as a director at other private companies. Mr. Costa earned both a B.S. in Pharmacy and a J.D. from St. John's University.

Mr. Costa brings to our Board of Directors broad operational leadership experience in the pharmaceutical and clinical services industries, including relevant legal, regulatory, governance and policy expertise. He also has extensive experience as a public company executive and board member in the pharmaceutical and biotechnology industries.

L. Patrick Gage, Ph.D. has served as a member of our Board of Directors since November 2009 and as Chairman of the Board of Directors since March 2010. Since July 2002, Dr. Gage has served as a consultant to the biopharmaceutical industry, including serving as an advisor to venture capital firms. From 1998 to 2002, Dr. Gage was President of Wyeth Research and subsequently also Senior Vice President, Science and Technology for American Home Products, parent company of Wyeth Research. From 1989 to 1998, he held roles of increasing responsibility at Genetics Institute, Inc., first as head of Research and Development, then as Chief Operating Officer and eventually as President. From 1971 to 1989, Dr. Gage held various positions in research management with Hoffmann-La Roche Inc., most recently serving as Vice President responsible for U.S. drug discovery. Dr. Gage has served as the Chairman of the Board of Directors of Tetrphase Pharmaceuticals since April 2013. Dr. Gage earned a bachelor's degree in Physics from the Massachusetts Institute of Technology and a Ph.D. in Biophysics from the University of Chicago.

Dr. Gage brings to our Board of Directors extensive experience as a public company executive and board member in the pharmaceutical and biotechnology industries and in strategies for bringing breakthrough medicines to approval and commercialization.

John T. Henderson, M.B., Ch.B. has served as a member of our Board of Directors since February 2009. Since December 2000, Dr. Henderson has served as a consultant to the pharmaceutical industry as president of Futurepharm LLC. Until his retirement in December 2000, Dr. Henderson was with Pfizer Inc. for over 25 years, most recently as a Vice President in the Pfizer Pharmaceuticals Group. Dr. Henderson previously held Vice Presidential level positions with Pfizer in Research and Development in Europe and later in Japan. He was also Vice President, Medical for Pfizer's Europe, U.S. and International Pharmaceuticals groups. Dr. Henderson has served on the Board of Directors of Myriad Genetics, Inc., a healthcare diagnostics company, since 2004, and has served as the Chairman of Myriad's Board of Directors since April 2005. He served on the Board of Directors of Myrexix, Inc. (formerly Myriad Pharmaceuticals, Inc.) from June 2009 until January 2013. Dr. Henderson earned his bachelor's of science and medical degrees from the University of Edinburgh and is a Fellow of the Royal College of Physicians (Ed.) and the Faculty of Pharmaceutical Medicine.

Dr. Henderson brings to our Board of Directors broad experience in matters relating to global pharmaceutical drug development in a wide range of therapeutic areas and stages of business development, and an extensive background as a public company executive, board member and consultant in the pharmaceutical industry.

Edward M. Kaye, M.D., has served as a member of our Board of Directors since since May 2016. Dr. Kaye currently serves as the Chief Executive Officer and a member of the Board of Sarepta Therapeutics, Inc., a biotechnology company. Prior to this, Dr. Kaye served as Interim Chief Executive Officer of Sarepta from March 31, 2015 to September 19, 2016 and as the SVP, Chief Medical Officer since 2011. Dr. Kaye was Group Vice President of Clinical Development at Genzyme Corporation, a biotechnology company, from April 2007 to June 2011, where he supervised the clinical research in the lysosomal storage disease programs and in the genetic neurological disorders. Prior to this, Dr. Kaye held various roles at Genzyme Corporation since 2001, including Vice President of Medical Affairs for Lysosomal Storage Diseases, Vice President of Clinical Research and Interim Head of PGH Global Medical Affairs. Dr. Kaye earned his B.S. in Biology from Loyola University and earned his M.D. at Loyola University Stritch School of Medicine. He received his Pediatric training at Loyola University Hospital, Child Neurology training at Boston City Hospital, Boston University, and completed his training as a Neurochemical Research Fellow (Geriatric Fellow) at Bedford VA Hospital, Boston University.

Dr. Kaye brings to our Board of Directors extensive clinical research and development experience, particularly his expertise in rare neuromuscular diseases which is highly relevant as we advance our clinical programs in ALS and SMA into late-stage development.

BOARD OF DIRECTORS

B. Lynne Parshall, Esq. has served as a member of our Board of Directors since February 2013. Ms. Parshall currently serves on the Board of Directors and as the Chief Operating Officer of Ionis Pharmaceuticals, Inc. She has held various positions of increasing responsibilities at Ionis since 1991. Prior to joining Ionis, Ms. Parshall was a partner at the law firm of Cooley LLP. Ms. Parshall served as a member of the Board of Directors of Regulus Therapeutics Inc. from January 2009 to June 2015, and prior to Regulus' conversion to a corporation, from November 2007 to January 2009. Ms. Parshall is a member of the Licensing Executives Society and a member of the American, California, and San Diego bar associations. Ms. Parshall holds a J.D. from Stanford Law School, California and B.A. from Harvard University, Massachusetts.

Ms. Parshall brings to our Board of Directors extensive operational and business development experience, particularly in the advancement and funding of potential products directed to specialty care and orphan drug designated indications.

Sandford D. Smith has served as a member of our Board of Directors since March 2012. Mr. Smith currently serves as Chairman of Aegerion Pharmaceuticals, Inc., a biopharmaceutical company, and has served on the Board of Directors since January 2012, and also served as Interim Chief Executive Officer from July 2015 to January 2016. From 1996 to 2011, Mr. Smith held various positions at Sanofi-Genzyme (formerly Genzyme Corporation), most recently leading the integration of Genzyme's international business into Sanofi's global organization. Prior to that, he served as Executive Vice President of Genzyme Corporation, and President of Genzyme International. From 1986 to 1996, Mr. Smith was President, Chief Executive Officer and a member of the Board of Directors of RepliGen Corporation. From 1977 to 1985, Mr. Smith held various positions at Bristol-Myers Squibb, most recently serving as Vice President of Business Development and Strategic Planning for the Pharmaceutical and Nutritional Division. He also has served on the Board of Directors of Neuralstem, Inc. and Arpicus Biosciences, Inc. since May and August 2014, respectively. Mr. Smith earned a bachelor's degree from the University of Denver.

Mr. Smith brings to our Board of Directors broad experience in matters relating to the launch and commercialization of new drugs in a wide range of therapeutic areas, and in particular drugs targeting rare disease indications. He also has extensive experience as a public company executive and board member in the pharmaceutical and biotechnology industries.

Wendell Wierenga, Ph.D. has served as a member of our Board of Directors since February 2011. From June 2011 to January 2014, Dr. Wierenga served as Executive Vice President, Research and Development, at Santarus, Inc., which was acquired by Salix Inc., which was subsequently acquired by Valeant Pharmaceuticals International, Inc. From 2006 to 2011, he served as Executive Vice President, Research and Development, at Ambit Biosciences Corporation. From 2003 to 2006, he served as Executive Vice President of Research and Development at Neurocrine Biosciences, Inc. From 2000 to 2003, Dr. Wierenga served as Chief Executive Officer of Syrrx, Inc. (now part of Takeda Pharmaceutical Company). From 1990 to 2000, he was Senior Vice President of Worldwide Pharmaceutical Sciences, Technologies and Development at Parke-Davis/Warner Lambert (now Pfizer, Inc.) Prior to that, Dr. Wierenga spent 16 years at Upjohn Pharmaceuticals in research and drug discovery roles, most recently as Executive Director of Discovery Research. Dr. Wierenga has served on the Board of Directors of Xenoport, Inc. from 2001 to August 2016, the Board of Directors of Ocera Therapeutics, Inc. since December 2013, the Board of Directors of Apricus Biosciences, Inc. and Concert Pharmaceuticals, Inc. since March 2014 and on the Board of Directors of Anacor Pharmaceuticals, Inc. from 2014 to July 2016. He also serves as the chairman of the Board of Directors of a privately held pharmaceutical research and development company. Dr. Wierenga also served on the Board of Directors of Onyx Pharmaceuticals, Inc. from 1996 to 2013. Dr. Wierenga holds a B.A. from Hope College and a Ph.D. in Chemistry from Stanford University.

Dr. Wierenga brings to our Board of Directors over thirty years of experience in matters relating to pharmaceutical drug discovery and development in a wide range of therapeutic areas, and an extensive background as a public company executive and board member in the pharmaceutical and biotechnology industries.

Board Leadership Structure

Our Board of Directors does not have a policy on whether the same person should serve as both the Chief Executive Officer and Chairman of the Board or, if the roles are separate, whether the Chairman should be selected from the non-employee directors or should be an employee. The Board of Directors believes that it should have the flexibility to make these determinations in the way that it believes best provides appropriate leadership for us at a given time.

The Board believes that its current leadership structure, with Mr. Blum serving as Chief Executive Officer and Dr. Gage serving as Chairman, is appropriate for us at this time. Both leaders are actively engaged on significant matters affecting us, such as long-term strategy. The Chief Executive Officer has overall responsibility for all aspects of our operations, while the Chairman has a greater focus on governance of the Company, including oversight of the Board of Directors. We believe this balance of shared leadership between the two positions is a strength for us.

Board Role in Risk Oversight

The role of our Board of Directors is to oversee the President and Chief Executive Officer and other senior management in the competent, lawful and ethical operation of the Company, including management's establishment and implementation of appropriate practices and policies with respect to areas of potentially significant risk to us. The Board as a whole is responsible for such risk oversight, but administers certain of its risk oversight functions through its committees, such as the Audit Committee, the Compensation and Talent Committee and the Nominating and Governance Committee.

The Audit Committee is responsible for the oversight of our accounting and financial reporting processes, including our internal control systems. In addition, the Audit Committee oversees and reviews our financially related risk management practices, including our investment policy. At least quarterly, management reports to the Board of Directors and Audit Committee on our significant risk areas, as identified by management. These reports include discussions of current and new areas of potential operational, legal or financial risk and status reports on risk mitigation programs undertaken by us.

As part of the of the Compensation and Talent Committee's risk oversight function, it considers whether our compensation policies and practices for our employees create risks that are reasonably likely to have a material adverse effect on us. In conducting this evaluation, the Compensation and Talent Committee has reviewed our current practices and procedures for awarding cash and equity compensation to employees through the annual performance review process, particularly as such practices and procedures apply to the establishment of the goals that are taken into consideration in the payment of bonuses. The Compensation and Talent Committee has determined that these practices do not encourage inappropriate risk-taking. In particular, because we are a development-stage company with no commercial sales, the Compensation and Talent Committee has concluded that our employees are not incentivized to take inappropriate risks to meet short-term goals, such as quarterly earnings or sales projections. Further, the Compensation and Talent Committee believes that there is sufficient Board of Director oversight of our processes for compensation determinations to avoid the establishment of incentives that are materially adverse to our interests. Accordingly, the Compensation and Talent Committee has determined that our compensation policies at this time do not create risks that are reasonably likely to have a material adverse effect on the Company.

The Nominating and Governance Committee oversees the risks associated with our corporate governance and operating practices, including those relating to the composition of Board of Directors, the structure and function of Board committees, and meeting logistics and policies. The Nominating and Governance Committee regularly reviews issues and developments relating to corporate governance and formulates and recommends corporate governance standards to the Board of Directors.

Independence of Directors

Each of our directors is independent as defined under the Nasdaq listing standards, except for Robert I. Blum, our President and Chief Executive Officer, who is not independent by virtue of his employment with the Company.

There is no family relationship between any director and executive officer of the Company.

Board of Directors Meetings and Committees

Our Board of Directors held twelve meetings during the fiscal year ended December 31, 2016. Each of the directors serving during fiscal year 2016 attended at least 75% of the aggregate of all meetings of the Board of Directors and the committees of the Board of Directors upon which such director served during his or her tenure. The Board of Directors has a standing Audit Committee, a Compensation and Talent Committee, a Nominating and Governance Committee and a Science and Technology Committee.

Audit Committee. The Audit Committee consists of directors B. Lynne Parshall, John T. Henderson and Sandford D. Smith. All members of the Audit Committee are independent (as independence is currently defined in Rules 5605(c)(2)(A)(i) and (ii) of the Nasdaq listing standards). The Board of Directors determined that B. Lynne Parshall is an "audit committee financial expert" as defined in the SEC rules, based on her experience as a Chief Operating Officer of a life science company. The Audit Committee operates under a written charter adopted by the Board of Directors. We maintain a copy of the Audit Committee charter on our website, *cytokinetics.com*. The information found on our website is not part of this or any other report filed with or furnished to the SEC.

The Audit Committee reviews our critical accounting policies and practices, consults with and reviews the services provided by our independent registered public accounting firm and selects our independent registered public accounting firm.

The Audit Committee held nine meetings during fiscal year 2016.

Compensation and Talent Committee. The Compensation and Talent Committee consists of directors Santo J. Costa, L. Patrick Gage, Sandford D. Smith and Wendell Wierenga. All of the members of the Compensation and Talent Committee

BOARD OF DIRECTORS

are independent (as independence is currently defined in Rule 5605(a)(2) of the Nasdaq listing standards) and Rule 5605(d)(2), as applied to compensation committee members. The Board of Directors has adopted a written charter for the Compensation and Talent Committee. We maintain a copy of the Compensation and Talent Committee charter on our website, cytokinetix.com.

The Compensation and Talent Committee reviews and approves the salaries and incentive compensation of our executive officers and administers our stock plans and employee benefit plans. The Compensation and Talent Committee, in consultation with the third-party executive compensation consultant and discussion with management, forms its own recommendations for all executive compensation (base salary, bonus, equity and other benefits) and director compensation. All new hire stock option and stock award grants to employees above the senior director level, including our executive officers, are approved by the Compensation and Talent Committee. In addition, the Compensation and Talent Committee approves the annual stock option grants for all employees as part of the annual performance review process. The Compensation and Talent Committee has delegated to Robert I. Blum, as President and Chief Executive Officer, the authorization to approve new hire stock option grants, within pre-approved new hire grant guidelines, for new hires at or below the senior director level. Further discussion of the role and function of our Compensation and Talent Committee can be found in the section below entitled "Compensation Discussion and Analysis."

The Compensation and Talent Committee engages the services of nationally recognized third-party professional executive compensation consulting firms to assist in benchmarking data from competitive peer group companies. The Compensation and Talent Committee engaged Radford Surveys + Consulting in 2015 and 2016 for this purpose.

The Compensation and Talent Committee held six meetings during fiscal year 2016.

Nominating and Governance Committee. The Nominating and Governance Committee consists of directors Santo J. Costa, L. Patrick Gage, John T. Henderson, and B. Lynne Parshall. All members of the Nominating and Governance Committee are independent (as independence is currently defined in Rule 5605(a)(2) and 5605(d)(2) of the Nasdaq listing standards). The Board of Directors has adopted a written charter for the Nominating and Governance Committee. We maintain a copy of the Nominating and Governance Committee charter on our website, cytokinetix.com.

The Nominating and Governance Committee assists the Board of Directors in identifying qualified persons to serve as directors, evaluates all proposed director nominees, evaluates incumbent directors before recommending renomination, and recommends approved candidates to the Board of Directors for appointment or renomination to Company stockholders. The Nominating and Governance Committee also regularly reviews issues and developments relating to corporate governance and formulates and recommends corporate governance standards to the Board of Directors. If there is a change in a director's employment, the Nominating and Governance Committee evaluates and makes a recommendation to the Board of Directors as to whether the potential termination of the director is appropriate.

The Nominating and Governance Committee has used search firms to assist in the identification and evaluation of qualified candidates to join the Board of Directors and may elect to do so again in the future.

The Nominating and Governance Committee held five meetings during fiscal year 2016.

To date, the Nominating and Governance Committee has not established a policy for considering candidates for director nominated by our stockholders, and will consider director candidates nominated by stockholders on a case-by-case basis, as appropriate. Because those candidates will receive substantially the same consideration that candidates recommended by members of the Board of Directors receive, the Board of Directors believes that it is appropriate for the Company to not have a formal policy for considering such candidates at this time. Stockholders may nominate candidates for director in accordance with the advance notice and other procedures contained in our Bylaws.

Science and Technology Committee. Our Board of Directors established the Science and Technology Committee in September 2014. The Science and Technology Committee consists of directors L. Patrick Gage, John T. Henderson, Edward Kaye (effective May 18, 2016) and Wendell Wierenga. All of the members of the Science and Technology Committee are independent (as independence is currently defined in Rule 5605(a)(2) of the Nasdaq listing standards). The Board of Directors has adopted a written charter for the Science and Technology Committee. We maintain a copy of the Science and Technology Committee charter on our website, cytokinetix.com.

The Science and Technology Committee provides guidance to management and the Board of Directors on emerging trends in healthcare, discovery research and clinical development, and reviews and advises management and the Board of Directors on the overall strategic direction and investment in the Company's research, development and technology programs. The Science and Technology Committee regularly reviews research programs and progress against goals, assesses the capabilities of key scientific and medical personnel and the depth and breadth of the scientific resources available to the Company, as well as reviewing and advising on regulatory strategy.

The Science and Technology Committee held four meetings during fiscal year 2016.

We do not have a formal policy regarding stockholder communication with the Board of Directors. However, our stockholders may communicate directly with the Board of Directors in writing, addressed to:

Board of Directors
c/o Corporate Secretary
Cytokinetics, Incorporated
280 East Grand Avenue
South San Francisco, California 94080
or by email to: *investor@cytokinetics.com*

The Corporate Secretary will review each stockholder communication. The Corporate Secretary will forward to the entire Board of Directors (or to members of a Board of Directors' committee, if the communication relates to a subject matter clearly within that committee's area of responsibility) each communication that relates to our business or governance, is not offensive, is legible in form and reasonably understandable in content, and does not merely relate to a personal grievance against us or an individual or the purpose of which is to further a personal interest not shared by the other stockholders generally. Stockholders who would like their submissions directed to an individual member of the Board of Directors may so specify, and the communication will be forwarded, as appropriate.

We do not have formal policies regarding attendance by members of the Board of Directors at our annual meetings of stockholders. Robert I. Blum, Santo Costa, L. Patrick Gage, John T. Henderson and Wendell Wierenga attended the 2016 Annual Meeting of Stockholders.

EXECUTIVE OFFICERS

The following table sets forth in alphabetical order the names of our executive officers and their ages and positions with us as of March 31, 2017:

Name	Age	Position
Robert I. Blum	53	President and Chief Executive Officer
Sharon A. Barbari	62	Executive Vice President, Finance and Chief Financial Officer
Bonnie A. Charpentier, Ph.D.	65	Senior Vice President, Regulatory Affairs and Compliance
David W. Cragg	61	Senior Vice President, Human Resources
Fady I. Malik, M.D., Ph.D.	52	Executive Vice President, Research and Development
Caryn McDowell	47	General Counsel and Chief Compliance Officer
Bradley P. Morgan, Ph.D.	56	Senior Vice President, Research and Non-Clinical Development
Elisabeth Schnieders, Ph.D.	50	Senior Vice President, Business Development
Andrew A. Wolff, M.D., F.A.C.C.	62	Senior Vice President and Chief Medical Officer

Executive Skills, Experience and Background

Robert I. Blum's biography is set forth under "Board of Directors" above.

Sharon A. Barbari has served as our Executive Vice President of Finance and Chief Financial Officer since July 2009. She served as our Senior Vice President of Finance and Chief Financial Officer from September 2004 through June 2009. From September 2002 to August 2004, she served as Chief Financial Officer and Senior Vice President of Finance and Administration of InterMune, Inc. From January 1998 to June 2002, she served at Gilead Sciences, Inc., most recently as Vice President and Chief Financial Officer. From 1996 to 1998, she served as Vice President, Strategic Planning at Foote, Cone & Belding Healthcare in San Francisco, an international advertising and marketing firm. From 1972 to 1995, she was employed by Syntex Corporation where she held various management positions in corporate finance, financial planning, marketing and commercial planning. Ms. Barbari has served on the Board of Directors of Sonoma Pharmaceuticals (formerly Oculus Innovative Sciences, Inc.), a specialty pharmaceutical company, since March 2014. Ms. Barbari received a B.S. in Accounting from San Jose State University.

Bonnie A. Charpentier, Ph.D. joined the Company in January 2014 as our Senior Vice President of Regulatory Affairs and Compliance. Prior to joining the Company, Dr. Charpentier served as Vice President of Regulatory and Quality at CymaBay Therapeutics, Inc. (formerly Metabolex, Inc.) where she provided strategic regulatory leadership from May 2007 to January 2014. From 2001 to 2006 she served as Vice President of Regulatory and Quality at Genitope Corp. From 1995 to 2001, she held regulatory positions at Roche Global Development, a division of F. Hoffman-La Roche Ltd., including serving as Vice President and Regulatory Site Head in Palo Alto, CA. From 1991 to 1995 she held regulatory positions of increasing responsibility at Syntex Corporation. Dr. Charpentier obtained her Ph.D. in Biology from the University of Houston.

David W. Cragg has served as our Senior Vice President, Human Resources since July 2009. He served as our Vice President of Human Resources from February 2005 through June 2009. From October 2000 until January 2005, Mr. Cragg managed his own human resources consulting practice. From March 2000 until its acquisition in September 2000 by Yahoo!, Inc., he was Vice President, Human Resources for eGroups Inc., an Internet email management company. Prior to October 2000, Mr. Cragg was a Principal Human Resources Consultant at Genentech, Inc. Mr. Cragg received a B.A. in Industrial Psychology from the University of California, Santa Cruz.

Fady I. Malik, M.D., Ph.D., has served as our Executive Vice President of Research and Development since November 2015. Dr. Malik served as our Senior Vice President of Research and Development from August 2014 to November 2015. Dr. Malik served as our Senior Vice President of Research and Early Development from June 2012 to August 2014. He has been with Cytokinetics since our inception in 1998, serving in a variety of roles, including Vice President, Biology from March 2008 to June 2012, all focused towards building our cardiovascular and muscle programs. Since 2000, Dr. Malik has held an appointment in the Cardiology Division of the University of California, San Francisco, where he is currently a Clinical Professor and an Attending Interventional Cardiologist at the San Francisco Veterans Administration Medical Center. Dr. Malik received a B.S. from the University of California at Berkeley, a Ph.D. from the University of California at San Francisco and his M.D. from the University of California at San Francisco.

Caryn G. McDowell has served as our General Counsel and Chief Compliance Officer since May 2016. She served as our General Counsel from May 2015 to May 2016. From January 2014 to February 2015, she served as Vice President, Deputy General Counsel and Assistant Secretary of InterMune, Inc., a biopharmaceutical company, where she was primarily

responsible for securities matters and commercialization. From June through December 2013, Ms. McDowell served as Associate General Counsel, Head of US Healthcare Law at Onyx Pharmaceuticals, Inc, a biopharmaceutical company (acquired by Amgen) where she lead a team of healthcare lawyers across several therapeutic areas. From 2012-2013, Ms. McDowell held the position of Executive Director, Corporate Law at Affymax, Inc., a biopharmaceutical company where she counseled the company on legal risk associated with commercialization. Prior to these positions, she served in legal roles of increasing responsibility at Genentech, and Millennium Pharmaceuticals. Prior to that, she served as Senior Counsel at the Office of the Inspector General (OIG) U.S. Department of Health and Human Services and as Assistant Attorney General Medicaid Fraud Control Unit of the Commonwealth of Massachusetts. She began her career as a litigator at Morrison Mahoney, LLP. Ms. McDowell received a J.D. from Boston University School of Law and a B.A. from the University of Michigan.

Bradley P. Morgan, Ph.D., has served as our Senior Vice President of Research and Non-Clinical Development since February 2017. Dr. Morgan served as our Senior Vice President of Drug Discovery and Early Development from November 2015 to February 2016, and he served as our Vice President of Drug Discovery and Early Development from June 2012 to November 2015. Dr. Morgan has been with Cytokinetics since 2002, serving in a variety of roles including Vice President, Chemistry, all focused towards discovery and early development of our cardiovascular and muscle programs. Prior to joining Cytokinetics, Dr. Morgan held several scientific and management positions at Pfizer Global research and development from 1993 to 2002. During that time, he focused on programs for treatments of obesity, diabetes, and related diseases, including nuclear receptor modulators and selective G-coupled protein receptor modulators. Dr. Morgan is a member of the American Chemical Society and of the Faculty of 1000 in Pharmacology and Drug Discovery. Dr. Morgan received his Ph.D. in Chemistry from the University of California, Berkeley and performed post-doctoral studies at the California Institute of Technology.

Elisabeth A. Schnieders, Ph. D. has served as our Senior Vice President, Business Development since December 2016. She served as our Vice President, Business Development from November 2009 to December 2016. From January 2000 to November 2009, she held positions of increasing responsibility in business development and alliance management. From 1998 to 1999 she served as Manager, Business Development of Acacia Biosciences, a drug discovery technology company. Dr. Schnieders received a S.B. in Life Sciences from MIT and a Ph.D. in Molecular and Cell Biology from the University of California, Berkeley.

Andrew A. Wolff, M.D., F.A.C.C. has served as our Senior Vice President and Chief Medical Officer since August 2014. Dr. Wolff served as our Senior Vice President of Clinical Research and Development and Chief Medical Officer from September 2004 to August 2014. From September 1994 until September 2004, Dr. Wolff held various positions of increasing responsibility at CV Therapeutics, most recently as Senior Vice President and Chief Medical Officer. From 1988 until 1994, he served in various drug development positions of increasing responsibility in both the United States and the United Kingdom for Syntex Corporation, most recently as the Executive Director of Medical Research and New Molecules Clinical Programs Leader. Since 1986, Dr. Wolff has held an appointment in the Cardiology Division of the University of California, San Francisco, where he is currently an Associate Clinical Professor, and is an Attending Cardiologist in the Coronary Care Unit at the San Francisco Veterans Administration Medical Center. Dr. Wolff received a B.A. in Chemistry and Biology from the University of Dayton and an M.D. from Washington University Medical School.

EXECUTIVE COMPENSATION

Compensation Discussion and Analysis

This Compensation Discussion and Analysis explains our compensation philosophy, policies and practices for 2016 for the following executives, who we refer to in this Compensation Discussion and Analysis and in the following tables as our named executive officers:

Name	Position
Robert I. Blum	President and Chief Executive Officer
Sharon A. Barbari	Executive Vice President, Finance and Chief Financial Officer
Fady Malik, M.D., Ph.D.	Executive Vice President, Research and Development
Bradley P. Morgan, Ph.D.	Senior Vice President, Research and Non-Clinical Development
Andrew A. Wolff, M.D.	Senior Vice President, Chief Medical Officer

Executive Summary

We design our executive compensation program to provide a competitive compensation package that focuses on corporate and individual performance and long-term results, while maximizing retention.

The highlights of our 2016 executive compensation program include:

- We provided merit salary increases in the range of 2% to 3.5%, to all members of our executive team in 2016 and also granted merit salary increases to other non-executive employees in 2016 consistent with our past practices.
- We provided an annual discretionary bonus designed to reward executives for achieving corporate goals and, except for our President and Chief Executive Officer, individual goals in their functional area.
- Our equity program for our named executive officers has consisted of stock options and in 2015, performance stock units ("PSUs"). The stock options were granted in February 2015 with exercise prices equal to 100% of the fair market value on the date of grant, each vesting monthly over four years based on continued service. No PSUs were granted in 2016, but PSUs granted in August 2015 remain subject to achievement of certain performance goals.

We held our second advisory stockholder vote on executive compensation at our 2014 Annual Meeting. Approximately 97% of the shares voted were cast in favor of our executive compensation. We did not hold an advisory vote on executive compensation at either of our 2015 Annual Meeting or at our 2016 Annual Meeting, as we solicit such advisory vote once every three years. The Compensation and Talent Committee of the Board of Directors, or the Committee, believes that this vote affirms our stockholders' support for the Company's compensation practices. After considering the outcome of the advisory vote, the Committee made no significant changes to the executive compensation program for 2015 or 2016. We will hold our next advisory vote on executive compensation at the 2017 Annual Meeting.

Overview of Compensation Program

Compensation Philosophy and Objectives

The Committee works to structure our executive compensation program to reward achievement of our business goals, align the executive officers' interests with those of our stockholders and encourage our executives to build a sustainable biopharmaceutical company. The Committee seeks to ensure that we maintain our ability to attract and retain superior employees in key positions by providing our executives compensation that is competitive relative to the compensation paid to similarly situated executives in a defined group of peer companies and the broader marketplace from which we recruit and compete for talent. The Committee seeks to ensure that the total compensation paid to our executive officers is fair, reasonable, competitive and reflective of their performance and contributions toward corporate goals and objectives. To meet these objectives, we provide base salary, cash bonus opportunities, equity awards, broad-based employee benefits with limited prerequisites, and severance benefits upon a loss of position in connection with a change in control.

In determining the amount and form of these compensation elements, the Committee considers a number of factors, including:

- compensation levels paid to similarly situated executives by our Peer Companies (as defined below), to attract and retain executives in a competitive market for talent;
- corporate and individual performance, including performance in relation to our business plan, and execution of individual, team and company-wide strategic initiatives, to focus executives on achieving our business objectives;

- the experiences and knowledge of our executives;
- internal pay equity of the compensation paid to one executive officer as compared to another — that is, the compensation paid to each executive should reflect the importance of his or her role to the Company as compared to the roles of the other executives — to promote teamwork and contribute to retention, while recognizing that compensation opportunities should increase based on increased levels of responsibility among officers;
- broader economic conditions, to ensure that our pay strategies account for how the larger economic environment impacts our business; and
- the potential dilutive effect of equity awards on our stockholders.

Role of the Committee

The Committee is generally responsible for reviewing, modifying, approving and otherwise overseeing the compensation policies and practices applicable to all of our employees, including the administration of our equity plans and employee benefit plans. As part of its responsibilities, the Committee establishes and implements compensation decisions for our named executive officers and evaluates the success of those decisions in supporting the Company's compensation philosophy for our named executive officers. The Committee reports its decisions regarding executive compensation matters to the entire Board.

As part of its deliberations, in any given year, the Committee may review and consider materials such as Company financial reports, financial projections, operational data and stock performance data. The Committee also reviews information such as total compensation that may become payable to the named executive officers in various hypothetical scenarios, executive stock ownership information, analyses of historical executive compensation levels and current company-wide compensation levels and benchmarking data provided by the independent compensation consultant. The Committee also seeks input from the Committee's independent compensation consultant and our President and Chief Executive Officer.

Role of the Independent Compensation Consultant

The Committee retained Radford Surveys + Consulting, an Aon Hewitt Company, or Radford, as its independent compensation consultant for compensation decisions in 2016. Pursuant to SEC rules, the Committee has assessed Radford's independence and concluded that no conflict of interest exists that would prevent Radford from independently advising the Committee. The Committee intends to continue to assess the independence of any of our compensation advisors, consistent with applicable NASDAQ listing standards.

For 2016, Radford provided the following services to the Committee:

- reviewed and provided recommendations on the composition of our 2016 Peer Companies;
- provided compensation data related to executives at our 2016 Peer Companies based on data from SEC filings and Radford's Life Science Survey;
- conducted a competitive review of the compensation of our named executive officers, including advising on the design and structure of our equity incentive compensation program;
- conducted a detailed assessment of our 2016 Peer Companies board of directors' compensation practices and developed a summary report of findings and recommendations, including advising on the design and structure of our equity incentive compensation program; and
- prepared an analysis of our share usage under our equity incentive plan in comparison to our 2016 Peer Companies based on data from SEC filings.

The Company pays for the costs of Radford's services. However, the Committee has the authority to engage and terminate Radford's services. Although Radford makes recommendations to the Committee, it has no authority to make compensation decisions on behalf of the Committee or the Company. Radford attends Committee meetings either in person or via conference call as deemed appropriate by the Committee Chair. The Company's management provides historical data, reviews reports for accuracy and interacts directly with Radford. The Committee, at its discretion, also communicates and meets separately with Radford.

Radford did not provide any other executive compensation services to the Company in 2016; however, the Company did engage Radford to provide survey data for our broader employee base to our management. The fee for these services in 2016 was less than \$10,000. The Committee approved of Radford providing these other non-executive compensation services as it determined that these services did not constitute a conflict of interest or prevent Radford from objectively performing its work for the Committee.

EXECUTIVE COMPENSATION

Role of Executive Officers in Compensation Decisions

For compensation decisions in 2016, our President and Chief Executive Officer aided the Committee by providing recommendations regarding the compensation of all executive officers other than himself. Each executive officer, with the exception of our President and Chief Executive Officer, participated in an annual performance review with our President and Chief Executive Officer to provide input about his or her contributions to the Company's goals and objectives for 2016. Our President and Chief Executive Officer participated in a review process, with respect to his own performance review, with a representative from the Board of Directors and Committee member. The Committee assessed the recommendations of our President and Chief Executive Officer (and, with respect to our President and Chief Executive Officer, the recommendations of the Board of Directors' representative) in the context of each executive officer's performance. No executive officer participated directly in the Committee's final determinations regarding the amount of any component of his or her own 2016 compensation package.

Our Human Resources, Finance and Legal departments work with our President and Chief Executive Officer to design and develop compensation programs for our named executive officers, to recommend changes to existing compensation programs, to establish corporate and individual performance goals, to prepare peer data comparisons and other Committee briefing materials and ultimately to implement the Committee's decisions. Our Senior Vice President, Human Resources and our President and Chief Executive Officer meet separately with Radford to convey information on proposals that management may make to the Committee, as well as to assist Radford in collecting information about the Company to perform its duties for the Committee.

Benchmarking

The Committee believes it is important when making its compensation-related decisions to be informed as to current compensation practices of comparable publicly held companies in the life sciences industry. To obtain independent and expert advice on appropriate compensation, the Committee engages Radford to analyze the executive compensation practices of a number of comparable publicly held companies in the life sciences industry, or our Peer Companies. The Committee, in consultation with Radford, reviews and adjusts the list of Peer Companies annually to ensure that the list provides a current and useful comparison of companies for use as a means of comparing our executive compensation levels relative to the market.

The Committee approved the following Peer Companies for use in making compensation decisions in 2016:

• Acceleron Pharma	• Five Prime Therapeutics, Inc.	• Rigel Pharmaceuticals, Inc.
• Amicus Therapeutics, Inc.	• Geron Corporation	• Sangamo Biosciences, Inc.
• Anthera Pharmaceuticals, Inc.	• Infinity Pharmaceuticals, Inc.	• Synta Pharmaceuticals, Inc.
• ArQule, Inc.	• Omeros Corporation	• Theravance Biopharma
• Array Biopharma, Inc.	• OncoMed Pharmaceuticals, Inc.	• Threshold Pharmaceuticals, Inc.
• ChemoCentryx, Inc.	• Peregrine Pharmaceuticals, Inc.	• XenoPort, Inc.
• Concert Pharmaceuticals, Inc.	• Regulus Therapeutics	• Xoma Corporation

Companies are evaluated and adjusted as appropriate for inclusion in these analyses based on business characteristics similar to ours. Potential companies are selected based on criteria that include business model, stage of development, market capitalization, year of initial public offering, employee headcount, research and development expenditures, cash reserves and revenue. The Committee selected the 2016 Peer Companies in November 2015. At the time of the determination, these companies had a market capitalization between \$123 million and \$936 million, had an employee head count between 20 and 287, and were generally at a comparable stage to us in the development of their lead drug candidate. The Committee determined that the foregoing selection criteria were appropriate for selecting the 2016 Peer Companies because at such time, Cytokinetics was a late-stage biopharmaceutical company with a market capitalization of approximately \$274 million and 92 employees.

After the 2016 Peer Companies were selected, Radford prepared an extensive analysis of the compensation practices of the Peer Companies as reported in their proxy statements, and offered additional analysis based on the compensation practices of a broader group of life science companies (a subset of what is included in the Radford Life Science Survey).

The Committee reviewed the cash and equity components from these benchmarking analysis in setting a total compensation package for each executive officer, while also reviewing each executive officer's past and anticipated contributions to the Company, current compensation package, compensation market trends for competitive positions, retention

risks and overall Company performance. While benchmarking information alone is not sufficient for setting compensation, the Committee believes that considering this information is an important aspect of diligence in compensation-related decisions. Other factors, such as economic conditions, internal pay equity and individual negotiations may play an important role with respect to the compensation offered to an executive in any given year.

In general and in line with the Company's general compensation philosophy, when considering the Peer Company data, the Committee aims to provide target total cash and long-term equity compensation at or around the median of the compensation paid to similarly situated executives employed by the Peer Companies for target level performance, with compensation above this level possible for exceptional performance. To achieve this positioning for target levels of compensation, the Committee generally sets the various compensation elements as follows:

- base salaries between the 50th and 75th percentile for comparable positions;
- target cash bonus compensation at a level such that, when combined with base salary, the target total cash compensation is at or around the median for comparable positions; and
- target long-term equity compensation at a level such that, when combined with target total cash compensation, target total cash and equity compensation is at or around the median for comparable positions.

When reviewing base salary the Committee takes into consideration the high cost of living and competitive life science marketplace in the Bay Area. In order to attract and retain key talent they believe it is appropriate to have a more meaningful level of fixed compensation in the form of base salary (between the 50th and 75th percentiles of the Peer Companies) to achieve this objective.

Compensation Components

Base Salary. We provide base salary as a fixed source of compensation for our executive officers for the services they provide to us during the year and to balance the impact of having the remainder of their compensation "at risk" in the form of discretionary annual cash bonuses and equity-based incentive compensation. The Committee recognizes the importance of base salaries as an element of compensation that helps to attract and retain talented executives. We believe that base salaries should be consistent with the salaries provided by our Peer Companies. The Committee targets base salary between the 50th and 75th percentiles of the Peer Companies. The Committee believes this positioning is necessary to attract and retain executives in the San Francisco Bay Area where the cost of living is higher than much of the country, and to enable us to recruit executive talent from companies that are at a more mature stage of development and therefore may have greater resources to provide higher base compensation, higher total compensation, greater job security and increased employee benefits.

The Committee generally reviews base salaries annually and adjusts base salaries if necessary to remain at the desired benchmark level as compared to the Peer Company data. The Committee also takes into account each executive's individual responsibilities, performance during the prior fiscal year and experience in deciding whether the benchmark percentile is the correct positioning for that executive that year. Additionally, in determining base salary increases, the Committee considers the Company's overall budget for merit salary increases for the year, and whether an executive officer was promoted or his or her responsibilities were or are expected to be modified during the year. The Company's 2016 budget for merit salary increases for all employees was an aggregate increase of 3% over the 2015 salary base salaries. There was no separate merit salary increase budget for our named executive officers.

The 2016 base salaries and the percentage increase of the prior year's base salary for each of the named executive officers were as follows:

Named Executive Officer	2016 Base Salary	% increase from 2015
Robert I. Blum	\$595,000	3.5%
Sharon A. Barbari	\$412,798	2.5%
Fady Malik, M.D., Ph.D.	\$449,694	2.5%
Bradley P. Morgan, Ph.D.	\$332,227	3.0%
Andrew A. Wolff, M.D.	\$395,760	2.0%

Annual Bonus. We structure our annual cash bonuses to provide incentives for our executive officers to achieve our annual corporate and individual performance objectives.

Target Bonuses. Each named executive officer's annual target bonus is expressed as a percentage of his or her base salary and is set at a level that, upon 100% achievement of the Company's corporate goals and the named executive officer's

EXECUTIVE COMPENSATION

individual performance goals, falls at the median level for a similar executive position as compared to the Peer Company data. In determining the split of the target bonus as between corporate and individual performance, the Committee believes that the more senior a named executive officer's position and operational responsibilities within the Company, the greater the percentage of his or her bonus that should be weighted to corporate rather than individual achievement. For example, our President and Chief Executive Officer's bonus is based entirely on corporate achievement and not on individual achievement.

Target bonus levels for 2016 performance for each of the named executive officers, expressed as a percentage of base salary, and the relative weightings of individual goals and corporate goals, were as follows:

Named Executive Officer	Target Bonus % of Salary	Individual Goal Weighting	Corporate Goal Weighting
Robert I. Blum	60%	0%	100%
Sharon A. Barbari	40%	25%	75%
Fady Malik, M.D., Ph.D.	40%	25%	75%
Bradley P. Morgan, Ph.D.	35%	25%	75%
Andrew A. Wolff, M.D.	35%	25%	75%

The 2016 target bonus levels were at the median level for similar executive positions as compared to the 2016 Peer Company data.

In the first quarter of each year, the Committee reviews and approves corporate goals presented by senior management. The Committee does weigh the goals but does not establish a specific performance formula. Rather, the Committee determines actual bonuses in a subjective fashion at the end of the year, taking into account the original goals and any other factors the Committee determines are material, in its discretion. The minimum bonus amount is zero, and the maximum is 120% of the target bonus amount. If the Committee determines that bonuses should not be awarded for corporate achievement for any reason, bonuses will not be paid even if the individual achievements were met. We believe this fully discretionary bonus structure allows the Committee to be responsive to the uncertainties and lack of predictability associated with being a biotechnology company dedicated to the discovery, development and commercialization of first-in-class therapeutics with novel mechanisms of action. The individual and corporate goals for 2016 are described in more detail in the section titled "Corporate and Individual Achievement Assessment."

Equity Awards. The Committee believes that providing a material portion of our executive officers' total compensation in equity awards aligns the interests of our executive officers with our stockholders, by linking the value of compensation to the value of our Common Stock. In determining the form and size of equity awards, the Committee considers information provided by Radford as to whether the complete compensation packages provided to each named executive officer, including prior equity awards, are sufficient to retain, motivate and adequately reward the executive for his or her contributions. In addition, in determining the size of equity awards, the Committee considers the anticipated value of the named executive officer's contributions going forward.

Stock Options. We grant stock options to our named executive officers when they join us and annually, on a discretionary basis, as part of our performance review and rewards process. All options have an exercise price equal to the fair market value of our Common Stock on the date of grant, and generally vest monthly based on continued service over a four-year period (with a one-year cliff for new hire grants). As a result of our option grant structure, the options provide a return to the executive officer only if the executive officer remains a service provider to the Company, and then only if the market price of our Common Stock appreciates relative to the option exercise price over the period in which the option vests and beyond.

In determining the size of stock option grants to executive officers in a given year, the Committee may consider:

- for each executive officer, the value of equity awards granted to executives in similar positions at our Peer Companies, targeting long-term equity compensation at a level such that, when combined with target total cash compensation, the officer's target total compensation opportunity is at or around the median for comparable positions;
- the equity budget for a given year for all of our employees, and the percentage of that budget allocated to be used for awards to our named executive officers;
- the retention and motivation value of equity awards that have been previously granted to each executive officer;
- each executive officer's total potential ownership as a percentage of our total outstanding shares; and
- internal pay equity among our named executive officers, to reflect the importance of each officer's responsibilities for the Company's success as compared to the other executive officers and our President and Chief Executive Officer.

The number of shares underlying stock options granted to our named executive officers in February 2016 was as follows:

Named Executive Officer	Option Shares
Robert I. Blum	275,000
Sharon A. Barbari	90,000
Fady Malik, M.D., Ph.D.	100,000
Bradley P. Morgan, Ph.D.	50,000
Andrew A. Wolff, M.D.	40,000

Except for the PSU's granted in 2015, no other form of equity awards were granted to named executive officers in 2016, 2015 or 2014.

Corporate and Individual Achievement Assessment Impacting Compensation Components

Corporate Achievement. Before the start of each calendar year, management prepares a set of corporate goals covering our expected operating and financial performance for the fiscal year. Our corporate goals are focused on corporate metrics and objectives that are intended to provide both near- and long-term stockholder value. The Committee then reviews and approves these corporate goals.

For 2016, the Committee approved corporate goals related to:

- completing patient enrollment in VITALITY-ALS, the Phase 3 clinical trial of tirasemtiv, in patients with ALS; initiating VIGOR-ALS, the open-label clinical for patients who have completed VITALITY-ALS; developing a New Drug Application/Marketing Authorization Application and commercial readiness plan for tirasemtiv;
- collaborating with Regulatory Affairs and Amgen to complete End of Phase 2 regulatory interactions in North America and Europe intended to result in a final agreed Phase 3 protocol and Special Protocol Assessment, for omecamtiv mecarbil, a novel investigational cardiac myosin activator and guide collaboration to start pivotal Phase 3 outcomes trial of omecamtiv mecarbil in 2016;
- completing patient enrollment in the first cohort of CY 5021, the Phase 2 clinical trial of CK-2127107 in patients with Spinal Muscular Atrophy;
- supplying material of our drug candidates for use in our skeletal muscle contractility development programs;
- advancing our research programs to lead optimization and candidate selection, and conducting a early research program selection process;
- raising capital and corporate partnering for our programs, including receipt of funds; and
- managing the budget to close the fiscal year with sufficient cash to cover projected expenditures for the following eighteen months.

At the end of each year, the Committee determines the overall level of corporate achievement, including assessing our performance relative to these goals. The Committee does not use a rigid formula in determining the Company's level of achievement, but instead considers:

- the degree of success achieved for each corporate goal, comparing actual results against the pre-determined deliverables associated with each objective;
- the difficulty of the goal;
- whether significant unforeseen obstacles or favorable circumstances altered the expected difficulty of achieving the desired results;
- other factors that may have made the stated goals more or less important to our success; and
- other accomplishments by us during the year or other factors which, although not included as part of the formal goals, are nonetheless deemed important to our near- and long-term success.

The Committee does assign weightings to the goals by functional area, but uses its discretion and judgment to determine a percentage that it believes fairly represents our achievement level for the year.

Individual Achievement. Individual goals for each named executive officer are derived from the corporate goals that relate to his or her functional area, except for our President and Chief Executive Officer, who has no individual goals apart from the corporate goals. Our President and Chief Executive Officer establishes the individual goals with each other named executive officer described below based on the relevant corporate goals and key functional area priorities for the year.

EXECUTIVE COMPENSATION

- Ms. Barbari's 2016 goals related to supporting partnering activities and providing financial analyses as needed for deal structures, recruiting staff to ensure continuity in workflow and reduce dependency on outside consultants, raising capital, managing the implementation of upgrades to our financial systems, managing spending within the Board-approved net operating budget and developing contingency plans to address future cash requirements, ensuring compliance with internal controls as required by COSO and AS-5, managing the development of Information Technology Commercial Readiness plans and meeting SEC reporting compliance requirements and supporting the presentation of key clinical data with appropriate investor events.
- Dr. Malik's 2016 goals related to advancing research programs to candidate selection and hit-to-lead stages, collaborating with Amgen on the development program for omeacamtiv mecarbil and the follow-on research program directed to next-generation compounds in our cardiac muscle contractility program, providing high quality, clinical trial supplies, directing the conduct of our VITALITY-ALS, VIGOR-ALS and CK-2127107 clinical trials.
- Dr. Morgan's 2016 goals related to collaborating with Commercial Planning to develop a Strategic Plan and Budget for the commercial supply of tirasemtiv to support a potential launch in mid-2018, guiding our early research programs process and overseeing Medical Chemistry, Analytical Chemistry, Automation & Technology and the Non-Clinical Development groups. His goals also included leading the efforts of candidate selection and to advance our Research programs and continued support of both our collaborations and their drug development programs.
- Dr. Wolff's 2016 goals related to providing clinical guidance and support to the VITALITY-ALS Phase 3 clinical study. Assisting the Regulatory team with strategy, document review and drafting and participating in Regulatory Agency meetings. Overseeing external collaborations with Amgen on Phase 3 study protocol for omeacamtiv mecarbil. As co-chair of the Astellas Joint Development Committee continue to define the development of CK-2127107

At the end of each year, the Committee, with input from our President and Chief Executive Officer, determines the overall level of individual achievement for each named executive officer, which includes, but is not limited to, an assessment of the executive's performance relative to these goals. The Committee does not use a rigid formula in determining each executive officer's level of achievement, but considers:

- the degree of success achieved against the specific deliverables associated with each objective;
- the difficulty of the goal;
- whether significant unforeseen obstacles or favorable circumstances altered the expected difficulty of achieving the desired results;
- the overall performance of the functional areas for which the executive officer has responsibility;
- the manner in which the executive officer contributes to the overall success of the Company, including areas outside of his or her responsibility;
- the overall management of the executive officer's staff;
- other factors that may have made the stated goals more or less important to our success; and
- other accomplishments by the executive officer during the year which, although not included as part of the formal goals, are nonetheless deemed important to our near- and long-term success.

The Committee does not assign weights in these assessments, but uses its discretion and judgment to determine, based on recommendations by the President and Chief Executive Officer, a percentage that it believes fairly represents the named executive officer's individual achievement level for the year.

2016 Executive Compensation Decisions

Corporate Achievement Level

In February 2017, the Committee determined that the Company had an overall corporate achievement level of 95% for 2016. This determination was based on progress in the advancement of the Company's skeletal and cardiac muscle R&D programs, the achievement of research program milestones, and the expansion of a collaboration agreement. The Committee considers these achievements alongside progress toward achieving business development goals, and other financing objectives and certain research goals.

Individual Achievement Levels

Mr. Blum's individual achievement level is based solely on the corporate achievement level, which for 2016 was 95%, as discussed above. In February 2017, the Committee determined that the other named executive officers had individual achievement levels for 2016, based on their individual goals for 2016 and achievements against them described above, as follows: Ms. Barbari — 95%; Dr. Malik — 95%; Mr. Morgan — 95%; and Dr. Wolff — 87%.

Robert I. Blum.

- Salary. The Committee granted a merit salary increase to Mr. Blum in 2016 of 3.5%. Accordingly, Mr. Blum's base salary for 2016 was \$595,000.
- Bonus. In February 2017, the Committee awarded Mr. Blum a bonus for 2016 performance of \$350,000, or 59% of his 2016 base salary. This was based on a target bonus of 60% of his base salary, multiplied by the corporate achievement level of 95%, however the Board did exercise some discretion in determining the final bonus amount.
- Equity. In February 2016, the Committee awarded Mr. Blum stock options to purchase 275,000 shares of common stock in consideration of his performance as President and Chief Executive Officer in 2015. This award was within the targeted equity award range based on an analysis of data from our 2016 Peer Companies, which resulted in targeted cash and equity compensation at or around the median.

Sharon A. Barbari.

- Salary. The Committee granted a merit salary increase to Ms. Barbari in 2016 of 2.5%. Accordingly, Ms. Barbari's base salary for 2016 was \$412,798.
- Bonus. In February 2017, the Committee awarded Ms. Barbari a bonus for her 2016 performance of \$156,863, or 38% of her 2016 base salary. This was based on a target bonus of 40% of base salary, multiplied by an overall achievement level of 95% (based on a weighting of 25% for her individual achievement level of 95% and 75% for the corporate achievement level of 95%).
- Equity. In February 2016, the Committee awarded Ms. Barbari stock options to purchase 90,000 shares of common stock. In determining the size of the award, the Committee considered her contribution with managing financial resources in 2015 which resulted in cash reserves in excess of those required to cover capital expenditure in the months following. This award was within the targeted equity award range based on an analysis of data from our 2016 Peer Companies which resulted in targeted cash and equity compensation at or around the median.

Fady Malik.

- Salary. The Committee granted a merit salary increase to Dr. Malik in 2016 of 2.5%. Accordingly, Dr. Malik's base salary for 2016 was \$449,694.
- Bonus. In February 2017, the Committee awarded Dr. Malik a bonus for his 2016 performance of \$170,884 or 38% of his 2016 base salary. This was based on a target bonus of 40% of base salary, multiplied by an overall achievement level of 95% (based on a weighting of 25% for his individual achievement level of 95% and 75% for the corporate achievement level of 95%).
- Equity. In February 2016, the Committee awarded Dr. Malik stock options to purchase 100,000 shares of common stock. In determining the size of the award, the Committee considered his contributions in research, preclinical and nonclinical development areas in 2016. This award was within the targeted equity award range based on an analysis of data from our 2016 Peer Companies which resulted in targeted cash and equity compensation at or around the median.

Bradley Morgan.

- Salary. The Committee granted a merit salary increase to Mr. Morgan in 2016 of 3%. Accordingly, Mr. Morgan's base salary for 2016 was \$332,227.
- Bonus. In February 2017, the Committee awarded Mr. Morgan a bonus for his 2016 performance of \$110,465 or 33% of his 2016 base salary. This was based on a target bonus of 35% of base salary, multiplied by an overall achievement level of 95% (based on a weighting of 25% for his individual achievement level of 95% and 75% for the corporate achievement level of 95%).
- Equity. In February 2016, the Committee awarded Mr. Morgan stock options to purchase 50,000 shares of common stock. In determining the size of the award, the Committee considered his contributions in 2016 in meeting the goals related to drug discovery and early development. This award was within the targeted equity award range based on an analysis of data from our 2016 Peer Companies which resulted in targeted cash and equity compensation at or around the median.

Andrew Wolff.

- Salary. The Committee granted a merit salary increase to Dr. Wolff in 2016 of 2%. Accordingly, Dr. Wolff's base salary for 2016 was \$395,760.

EXECUTIVE COMPENSATION

- *Bonus.* In February 2017, the Committee awarded Dr. Wolff a bonus for his 2016 performance of \$100,000 or 25% of his 2016 base salary. This was based on management discretion.
- *Equity.* In February 2016, the Committee awarded Dr. Wolff stock options to purchase 40,000 shares of common stock. In determining the size of the award, the Committee considered his contributions in 2016 in meeting the goals related to medical affairs. This award was within the targeted equity award range based on an analysis of data from our 2016 Peer Companies which resulted in targeted cash and equity compensation at or around the median.

2017 Compensation Decisions

In February 2017, the Committee made the following decisions with respect to the compensation of the named executive officers.

Named Executive Officer	2017			Target Bonus as a % of Base Salary
	Base Salary	Option Shares	RSU's	
Robert I. Blum	\$615,000	205,000	60,000	60%
Sharon A. Barbari	\$425,182	—	—	40%
Fady I. Malik	\$463,185	50,000	30,000	40%
Bradley P. Morgan, Ph.D.	\$342,194	20,000	20,000	35%
Andrew A. Wolff, M.D.	\$403,675	15,000	15,000	35%

Severance Benefits and Employment Agreements

We have entered into Executive Employment Agreements with each of our named executive officers. These agreements provide for salary and benefit continuation, bonus payments and accelerated vesting of equity awards upon the termination of their employment either by us without cause, or by the executive for good reason following a loss of position in connection with a change of control of the Company. The terms of these agreements are described in more detail in the section entitled "Potential Payments Upon Change of Control." In addition, our equity plan provides that all employee equity awards will be subject to full acceleration if they are not assumed or replaced with comparable awards by the acquirer.

The Committee believes these severance and change of control benefits are an essential element of our executive compensation package and assist it in recruiting and retaining talented executive officers. The Committee believes these benefits serve to minimize the distractions to the executive, reduce the risk that the executive will depart the Company before an acquisition is consummated, and allow the executive to focus on continuing normal business operations and the success of a potential business combination, rather than worrying about how business decisions that may be in the best interest of the Company and its stockholders will impact his or her own financial security. That is, these change of control arrangements help ensure stability among our executive officer ranks and will enable our executives to maintain a balanced perspective in making overall business decisions during periods of uncertainty. Further, these agreements are in line with customary practices at an executive officer level at the Peer Companies.

Other Compensation

Our executive officers are eligible to participate in our employee benefit plans, including medical, dental, life insurance, employee stock purchase and 401(k) plans. These benefits are available to our executives on the same terms and conditions as our other employees. Our executive officers do not receive any perquisites other than those provided to all employees.

Equity Compensation Policies

Our policy is to make new-hire and annual equity grants on pre-determined dates as follows:

- The Committee pre-approves new hire stock option grants above the senior director level, including our executive officers, before an offer is made. The Committee has delegated to Robert I. Blum, as President and Chief Executive Officer, the authorization to approve new hire stock option grants, within pre-approved new hire grant guidelines, for new hires at or below the senior director level before an offer is made. New hire stock options are granted on the last day of the month in which the employee is hired.
- We make annual equity grants, on a discretionary basis, as part of our performance review and reward process. The Committee makes annual grants to employees at a Committee meeting held during the first quarter of each fiscal year.

The exercise price of the stock options is not less than the closing price of our Common Stock on the NASDAQ Capital Market on the grant date of the option. Our policy is not to purposely accelerate or delay the public release of material information in consideration of a pending equity grant to allow the grantee to benefit from a more favorable stock price.

We encourage our executive officers to hold a significant equity interest in the Company, but we have not set specific ownership guidelines. We have a policy that prohibits our executive officers, directors and other members of management from engaging in short sales, transactions in put or call options, hedging transactions or other inherently speculative transactions with respect to our stock.

Tax Deductibility of Executive Compensation

Section 162(m) of the Code limits the amount that a public company may deduct from federal income taxes for remuneration paid to the chief executive officer and the three other most highly paid executive officers, other than the chief financial officer, to \$1.0 million per executive per year, unless certain requirements are met. Section 162(m) provides an exception from this deduction limitation for certain forms of “performance-based compensation,” including the gain recognized by executive officers upon the exercise of qualifying compensatory stock options. While the Committee is mindful of the benefit to us of the full deductibility of compensation, the Committee believes that it should not be constrained by the requirements of Section 162(m) where those requirements would impair flexibility in compensating our executive officers in a manner that can best promote our corporate objectives. Accordingly, although our grants of stock options to our executive officers will be considered “performance-based compensation” under Section 162(m), their annual cash bonuses, if any, will not. We intend to continue to compensate our executive officers in a manner consistent with what we believe are the best interests of the Company and our stockholders.

Accounting Considerations

In determining the size and type of equity awards, the Committee considers the potential impact of the accounting guidance for stock-based compensation. However, we do not set a specific budget for equity compensation based on the accounting cost.

Compensation Recovery Policy

One of the objectives of our compensation program for our named executive officers is to make a substantial portion of compensation paid to our executive officers dependent on the Company’s overall financial performance. In order to ensure that our named executive officers take full account of risks to the Company and its stockholders in their decision-making, and to reduce such risks wherever practicable, our Board adopted a clawback policy and delegated authority to its Compensation Committee to administer it.

Our clawback policy allows the Company to seek repayment of incentive compensation that was erroneously paid. The policy provides that if the Board, or Compensation Committee as applicable, determines that there has been a material misstatement of publicly issued financial results from those previously issued to the public [due to a knowing violation of rules and regulations of the Securities and Exchange Commission or Company policy, or the willful commission of an act of fraud, dishonesty, gross recklessness or gross negligence], our Board or Compensation Committee will review all incentive compensation made to our [executive] officers during the [three] year period prior to the restatement on the basis of having met or exceeded specific performance targets. If such payments would have been lower had they been calculated based on such restated results, our Board or Compensation Committee will (to the extent permitted by governing law) seek to recoup the payments in excess of the amount that would have been paid based on the restated results.

In addition, as a public company subject to Section 304 of the Sarbanes-Oxley Act of 2002, if we are required as a result of misconduct to restate our financial results due to the material noncompliance with any financial reporting requirements under the federal securities laws, our President and Chief Executive Officer and Executive Vice President, Finance and Chief Financial Officer may be legally required to reimburse us for any bonus or other incentive-based or equity-based compensation they received. In addition, we will comply with the requirements of the Dodd-Frank Wall Street Reform and Consumer Protection Act and will adopt a compensation recovery policy once the SEC adopts final regulations on the subject.

EXECUTIVE COMPENSATION

Compensation and Talent Committee Report

The Compensation and Talent Committee of the Company has reviewed and discussed the Compensation Discussion and Analysis required by Item 402(b) of Regulation S-K with management and, based on such review and discussions, the Compensation and Talent Committee recommended to the Board of Directors that the Compensation Discussion and Analysis be included in this proxy statement.

MEMBERS OF THE COMPENSATION AND TALENT COMMITTEE

Santo J. Costa
L. Patrick Gage
Sandford D. Smith
Wendell Wierenga

Dated: March 31, 2017

Compensation Committee Interlocks and Insider Participation

During fiscal year 2016, directors Santo J. Costa, L. Patrick Gage, Sandford D. Smith and Wendell Wierenga served on the Compensation and Talent Committee. No current or former member of the Compensation and Talent Committee or executive officer of the Company has served as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving as a member of our Board of Directors or Compensation and Talent Committee. The current and former members of the Compensation and Talent Committee were not officers or employees of the Company while a member of the Compensation and Talent Committee during fiscal year 2016.

Risk Analysis of the Compensation Programs

The Committee has reviewed our compensation policies as generally applicable to our employees and believes that our policies do not encourage excessive and unnecessary risk-taking and that the level of risk that they do encourage is not reasonably likely to have a material adverse effect on us. The design of our compensation policies and programs is intended to encourage our employees to remain focused on both our short- and long-term goals. For example, while our cash bonus plans measure corporate and individual performance on an annual basis, the stock options typically vest over a number of years, which the Committee believes encourages employees to focus on sustained stock price appreciation, thus limiting the potential value of excessive risk-taking.

Summary Compensation Table

The following table summarizes the total compensation earned by or paid to each of the named executive officers for the fiscal years ended December 31, 2016, 2015 and 2014:

Name and Principal Position	Year	Salary ⁽¹⁾	Bonus ⁽²⁾	Stock Awards ⁽³⁾	Option Awards ⁽⁴⁾	All Other Compensation ⁽⁵⁾	Total
Robert I. Blum President and Chief Executive Officer	2016	\$591,667	\$350,000	—	\$1,236,290	—	\$2,177,957
	2015	\$571,667	\$310,500	\$1,259,820	\$1,122,380	—	\$3,264,367
	2014	\$555,000	\$323,010	—	\$1,310,900	—	\$2,188,910
Sharon A. Barbari Executive Vice President, Finance and Chief Financial Officer	2016	\$411,120	\$156,863	—	\$404,604	\$7,950	\$980,537
	2015	\$402,730	\$144,983	\$524,925	\$420,893	\$7,950	\$1,501,481
	2014	\$400,775	\$153,886	—	\$458,815	\$7,800	\$1,021,276
Fady Malik, M.D., Ph.D. Executive Vice President, Research and Development	2016	\$447,866	\$170,884	—	\$449,560	\$7,950	\$1,076,260
	2015	\$415,891	\$157,941	\$699,900	\$561,190	\$7,950	\$1,842,872
	2014	\$384,583	\$131,891	—	\$655,450	\$7,800	\$1,179,724
Bradley P. Morgan, Ph.D. ⁽⁶⁾ Senior Vice President, Research and Non-Clinical Development	2016	\$330,614	\$110,465	—	\$224,780	\$7,950	\$673,809
	2015	\$307,142	\$88,782	\$419,940	\$168,357	\$7,950	\$992,171
Andrew Wolff, M.D. Senior Vice President, Chief Medical Officer	2016	\$394,467	\$100,000	—	\$179,824	—	\$674,291
	2015	\$388,000	\$90,000	\$349,950	\$196,417	—	\$1,024,367
	2014	\$388,000	\$85,000	—	—	—	\$473,000

- (1) Includes amounts earned but deferred at the election of the named executive officers pursuant to our 401(k) employee savings and retirement plan.
- (2) Represents amounts earned in 2016 pursuant to our Employee Bonus Plan and paid on March 10, 2017.
- (3) Amounts in this column reflect the grant date fair value of PSUs granted pursuant to our equity incentive plans calculated in accordance with the accounting guidance for stock compensation. Assumptions used for the valuation of performance units are set forth in Note 11 to our audited financial statements for the fiscal year ended December 31, 2016, included in our Annual Report on Form 10-K for each of such years.
- (4) Amounts in this column reflect the grant date fair value of awards granted pursuant to our equity incentive plans, calculated in accordance with the accounting guidance for stock compensation. Assumptions used for the valuation of option grants are set forth in Note 11 to our audited financial statements for each of the fiscal years ended December 31, 2016, 2015 and 2014, included in our Annual Report on Form 10-K for each of such years.
- (5) Represents matching contributions under the Company's 401(k) plan.
- (6) Dr. Morgan was became an executive officer of the Company in 2015 and therefore has no compensation disclosed for 2014.

Employment and Other Agreements

We have entered into Executive Employment Agreements with each named executive officer.

The Executive Employment Agreements provide for such officers to remain at-will employees of the Company and to receive salary, bonus and benefits as determined at the discretion of the Board of Directors. Such agreements also provide for such officers to receive certain benefits if, within the eighteen-month period following a change of control of the Company, they resign for good reason or are terminated by us or our successor other than for cause — see "Potential Payments Upon Change of Control" below.

EXECUTIVE COMPENSATION

Grants of Plan Based Awards in 2016

The following table sets forth information regarding plan-based awards to each of the named executive officers during 2016.

Name	Grant Date	Estimated Future Payouts Under Employee Bonus Plan ⁽¹⁾			All Other Option Awards: Number of Securities Underlying Options (#) ⁽²⁾	Exercise or Base Price of Option Awards (\$)	Grant Date Fair Value of Stock and Option Awards (\$)
		Threshold (\$)	Target (\$)	Maximum (\$)			
Robert I. Blum		\$ 0	\$357,000	\$428,400	—	—	—
	02/23/16	—	—	—	275,000	\$6.67	\$1,236,290
Sharon A. Barbari		\$ 0	\$165,119	\$198,143	—	—	—
	02/23/16	—	—	—	90,000	\$6.67	\$ 404,604
Fady I. Malik, M.D., Ph.D.		\$ 0	\$179,878	\$215,853	—	—	—
	02/23/16	—	—	—	100,000	\$6.67	\$ 449,560
Bradley P. Morgan, Ph.D.		\$ 0	\$116,279	\$139,535	—	—	—
	02/23/16	—	—	—	50,000	\$6.67	\$ 224,780
Andrew A. Wolff, M.D.		\$ 0	\$138,516	\$166,219	—	—	—
	02/23/16	—	—	—	40,000	\$6.67	\$ 179,824

(1) Reflects each named executive officer's participation in our Employee Bonus Plan, calculated based on each officer's respective base salary and position as of December 31, 2016. Amounts actually earned under the plan in 2016, if any, are reflected in the Summary Compensation Table above.

(2) All stock options granted to the named executive officers in 2016 were granted under the Amended and Restated 2004 Equity Incentive Plan. Each option vests monthly over a four-year period.

Outstanding Equity Awards at December 31, 2016

The following table sets forth information regarding outstanding equity awards held by each named executive officer as of December 31, 2016.

	Option Awards				Stock Awards	
	Number of Securities Underlying Unexercised Options		Option Exercise Price	Option Expiration Date	Number of Shares or Units That Have Not Vested ⁽²⁾	Market Value of Shares or Units That Have Not Vested ⁽²⁾
	Exercisable	Unexercisable ⁽¹⁾				
Robert I. Blum	41,666	—	\$40.86	03/14/2017		
	33,333	—	\$20.22	02/28/2018		
	45,832	—	\$11.10	02/26/2019		
	45,000	—	\$18.48	02/24/2020		
	83,332	—	\$ 9.42	02/28/2021		
	74,999	—	\$ 6.30	03/05/2022		
	125,000	8,333	\$ 6.00	03/05/2023		
	141,666	58,334	\$ 9.65	02/24/2024		
	91,667	108,333	\$ 7.96	02/26/2025		
	57,291	217,709	\$ 6.67	02/23/2026		
					180,000	\$2,187,000
Sharon A. Barbari	9,999	—	\$40.86	03/14/2017		
	20,499	—	\$20.22	02/28/2018		
	25,000	—	\$11.10	02/26/2019		
	22,499	—	\$18.48	02/24/2020		
	33,332	—	\$ 9.42	02/28/2021		
	29,166	—	\$ 6.30	03/05/2022		
	46,875	3,124	\$ 6.00	03/05/2023		
	49,583	20,417	\$ 9.65	02/24/2024		
	34,375	40,625	\$ 7.96	02/26/2025		
	18,750	71,250	\$ 6.67	02/23/2026		
					75,000	\$ 911,250
Fady I. Malik, M.D., Ph.D.	3,299	—	\$40.86	03/14/2017		
	3,134	—	\$20.22	02/28/2018		
	6,666	—	\$11.10	02/26/2019		
	8,333	—	\$18.48	02/24/2020		
	12,500	—	\$ 9.42	02/28/2021		
	29,166	—	\$ 6.30	03/05/2022		
	46,875	3,125	\$ 6.00	03/05/2023		
	70,833	29,167	\$ 9.65	02/24/2024		
	45,833	54,167	\$ 7.96	02/26/2025		
	20,833	79,167	\$ 6.67	02/23/2026		
					100,000	\$1,215,000

EXECUTIVE COMPENSATION

	Option Awards				Stock Awards	
	Number of Securities Underlying Unexercised Options		Option Exercise Price	Option Expiration Date	Number of Shares or Units That Have Not Vested ⁽²⁾	Market Value of Shares or Units That Have Not Vested ⁽²⁾
	Exercisable	Unexercisable ⁽¹⁾				
Morgan Bradley, Ph.D.	3,299	—	\$40.86	03/14/2017		
	3,134	—	\$20.22	02/28/2018		
	6,666	—	\$11.10	02/26/2019		
	8,332	—	\$18.48	02/24/2020		
	12,500	—	\$ 9.42	02/28/2021		
	14,999	—	\$ 6.30	03/05/2022		
	23,437	1,562	\$ 6.00	03/05/2023		
	21,250	8,750	\$ 9.65	02/24/2024		
	13,750	16,250	\$ 7.96	02/26/2025		
	10,416	39,584	\$ 6.67	02/23/2026		
					60,000	\$729,000
Andrew Wolff, M.D.	9,166	—	\$40.86	03/14/2017		
	20,832	—	\$20.22	02/28/2018		
	21,666	—	\$11.10	02/26/2019		
	22,500	—	\$18.48	02/24/2020		
	33,332	—	\$ 9.42	02/28/2021		
	7,291	—	\$ 6.30	03/05/2022		
	39,062	2,604	\$ 6.00	03/05/2023		
	16,042	18,958	\$ 7.96	02/26/2025		
	8,333	31,667	\$ 6.67	02/23/2026		
					50,000	\$607,500

(1) All currently unexercisable options in this table vest monthly over a four-year period from the date of grant.

(2) The performance stock units have specific clinical development milestone vesting triggers as well as additional time based vesting conditions. Vesting of 25% occurs March 31, 2017, 50% occurs March 31, 2018 and 25% on March 31, 2019, and only upon Compensation Committee certification of performance achievement. No stock units are earned if the goals are not met. The market value of the stock units is based on the closing stock price of \$12.15 per share of our Common Stock as of December 31, 2016.

Option Exercises and Vesting of Stock in 2016

There were no stock options exercised and no stock awards vested during the fiscal year ending December 31, 2016.

Pension Benefits

We do not provide our employees, including our named executive officers, with a defined benefit pension plan or any supplemental executive retirement plans or retiree health benefits.

Nonqualified Deferred Compensation

We do not have a nonqualified defined contribution plan or other nonqualified deferred compensation plan.

Potential Payments Upon Termination or Change of Control

We have entered into Executive Employment Agreements with each of the named executive officers. Such agreements provide for such officers to receive certain benefits if, within the eighteen-month period following a change of control of the Company, the executive officer resigns for good reason or is terminated by us or our successor other than for cause (a "qualifying resignation or termination") and such officer signs a standard release of claims with us. In addition, our executives will receive accelerated vesting of equity awards upon a change of control in which the acquirer does not assume all equity awards. However, we do not have any other agreements, plans or arrangements that provide for severance or other benefits upon termination for other reasons.

EXECUTIVE COMPENSATION

“Good reason” includes a material reduction in salary; a material decrease in duties or responsibilities; a material decrease in the duties or responsibilities of the supervisor to whom the executive officer is required to report; a material decrease in the budget over which the executive officer has authority; relocation of the place of employment to a location more than fifty miles from our location at the time of the change in control; or a material breach of the Executive Employment Agreement by us or our successor.

“Cause” includes failure to substantially perform the duties of the job other than due to physical or mental illness; engaging in conduct that is materially injurious to us or constitutes gross misconduct; material breach of the Executive Employment Agreement by the executive officer; material breach of Company policies that have been adopted by the Board of Directors; conviction of a felony; or fraud against us.

Under their Executive Employment Agreements, upon a qualifying resignation or termination, Ms. Barbari, Dr. Malik, Dr. Morgan and Dr. Wolff will become entitled to receive: continuing severance payments at a rate equal to their base salary for a period of eighteen months; a lump sum payment equal to their full target annual bonus; acceleration in full of vesting of equity awards held by them; and continued employee benefits until the earlier of eighteen months following the date of termination or resignation or the date they obtain employment with generally similar employee benefits. In the event that such payments constitute “parachute payments” within the meaning of Section 280G of the Code and become subject to the excise tax imposed under Section 4999 of the Code, the Executive Employment Agreements of Ms. Barbari, Dr. Malik, Dr. Morgan and Dr. Wolff each provide that the benefit amount may be reduced so that no portion of the payment is subject to the excise tax.

Under his Executive Employment Agreement, upon a qualifying resignation or termination, Mr. Blum will become entitled to receive: continuing severance payments at a rate equal to his base salary for a period of twenty-four months; a lump sum payment equal to his full target annual bonus; acceleration in full of vesting of equity awards held by him; and continued employee benefits until the earlier of twenty-four months following the date of termination or resignation or the date he obtains employment with generally similar employee benefits. In the event that such payments constitute “parachute payments” within the meaning of Section 280G of the Code and become subject to the excise tax imposed under Section 4999 of the Code, Mr. Blum is eligible to receive a payment from us sufficient to pay the excise tax, and a tax gross-up payment, which is an additional payment sufficient to pay the excise tax and other income taxes resulting from the initial excise tax payment. This excise tax and tax gross-up payment has been a benefit we have historically offered at the Chief Executive Officer level based on the uniqueness and importance of that role to our business.

The provisions of each Executive Employment Agreement are intended to comply with the requirements of Section 409A so that none of the severance payments or benefits to be provided under the agreements will be subject to the additional tax imposed under Section 409A. If severance payments to an executive officer at the time of termination would trigger the additional tax imposed under Section 409A, then such payments will instead become payable to the executive officer starting six months and one day after the termination date.

Severance payments and benefits provided to an executive officer under an Executive Employment Agreement following a qualifying resignation or termination are subject to certain conditions including adherence to existing confidentiality, proprietary information and invention assignment agreements, and non-competition clauses.

The following table summarizes the potential benefits the named executive officers would receive in the circumstances described above assuming their employment had been terminated on December 31, 2016:

Name	Salary	Bonus	Acceleration of Vesting of Performance Stock Units ⁽¹⁾	Acceleration of Vesting of Stock Options ⁽²⁾	Continuation of Employee Benefits ⁽³⁾	Excise Tax Gross Up ⁽⁴⁾	Total ⁽⁵⁾
Robert I. Blum	\$1,190,000	\$357,000	\$2,187,000	\$1,844,044	\$81,126	\$2,292,283	\$7,951,453
Sharon A. Barbari	\$ 619,197	\$165,119	\$ 911,250	\$ 630,924	\$60,479	—	\$2,386,969
Fady I. Malik, M.D., Ph.D.	\$ 674,541	\$179,878	\$1,215,000	\$ 752,931	\$60,092	—	\$2,882,442
Bradley Morgan, Ph. D.	\$ 498,341	\$116,269	\$ 729,000	\$ 316,489	\$60,092	—	\$1,720,201
Andrew Wolff, M.D.	\$ 593,640	\$138,516	\$ 607,500	\$ 268,984	\$42,499	—	\$1,651,139

(1) The value of the acceleration of vesting of the PSUs is calculated using the closing market price of the Company’s Common Stock as of December 31, 2016 of \$12.15 and assumes all of the performance goals have been met.

(2) The value of the acceleration of vesting of stock options is calculated as the amount by which the closing market price of the Company’s Common Stock as of December 31, 2016 of \$12.15 exceeds the exercise price for unvested stock options as of December 31, 2016.

(3) Represents the cost of premiums for medical, dental, vision, life and disability insurance coverage under our group employee benefit plans.

(4) Based on the payment amounts reflected above, Mr. Blum would be subject to excise taxes under Sections 280G and 4999 of the Code. Under his Executive Employment Agreement, Mr. Blum is entitled to receive a payment from the Company sufficient to pay the excise tax, and an excise tax gross-up payment, which is an additional payment sufficient to pay the excise tax and other income taxes resulting from the initial excise tax payment.

(5) Other than Mr. Blum, our named executive officers are not entitled to an excise tax gross-up payment with respect to their change-in-control payments and benefits. However, the payments and benefits may be reduced to avoid excise tax if such reduction would enable the executive to net more on an after-tax basis than they would in the absence of a reduction.

DIRECTOR COMPENSATION

Director Summary Compensation Table for 2016

The following table summarizes the total compensation earned by our Directors for the fiscal year ended December 31, 2016.

Name	Fees Earned or Paid in Cash (\$) ⁽¹⁾	Option Awards (\$) ⁽¹⁾⁽²⁾	Total (\$)
Robert I. Blum ⁽³⁾	—	—	—
Santo J. Costa ⁽⁴⁾	\$57,500	\$101,644	\$159,144
L. Patrick Gage, Ph.D. ⁽⁵⁾	\$32,500	\$202,746	\$235,246
John T. Henderson, M.B., Ch.B. ⁽⁶⁾	\$25,000	\$160,620	\$185,620
Edward M. Kaye ⁽⁷⁾	\$3,750	\$211,213	\$214,963
B. Lynne Parshall, Esq. ⁽⁸⁾	\$45,000	\$131,132	\$176,132
Sandford D. Smith ⁽⁹⁾	\$37,500	\$131,132	\$168,632
Wendell Wierenga, Ph.D. ⁽¹⁰⁾	\$52,500	\$131,132	\$183,632

- (1) Mr. Gage, Dr. Henderson and Dr. Kaye made an annual election to receive 100% of their retainer fee for 2016 in stock options. Ms. Parshall, Mr. Smith and Dr. Wierenga each made an annual election to receive 50% of their retainer fees for 2016 in stock options.
- (2) Amounts in this column reflect the grant date fair value of awards granted in 2016, calculated in accordance with the accounting guidance for stock compensation. Assumptions used for the valuation of option grants are set forth in Note 11 to our audited financial statements for the fiscal year ended December 31, 2016, included in our Annual Report on Form 10-K.
- (3) Employee Directors receive no separate compensation for their services as members of the Board of Directors. Refer to summary compensation table, for the employee director's compensation earned for the fiscal year ended December 31, 2016.
- (4) As of December 31, 2016, Mr. Costa had outstanding options to purchase 68,331 shares of Common Stock, of which 59,997 were exercisable.
- (5) As of December 31, 2016, Dr. Gage had outstanding options to purchase 169,343 shares of Common Stock, of which 159,759 were exercisable.
- (6) As of December 31, 2016, Dr. Henderson had outstanding options to purchase 146,510 shares of Common Stock, of which 137,446 were exercisable.
- (7) As of December 31, 2016, Dr. Kaye had outstanding options to purchase 40,175 shares of Common Stock, of which 11,117 were exercisable.
- (8) As of December 31, 2016, Ms. Parshall had outstanding options to purchase 84,117 shares of Common Stock, of which 75,418 were exercisable.
- (9) As of December 31, 2016, Mr. Smith had outstanding options to purchase 95,439 shares of Common Stock, of which 86,740 were exercisable.
- (10) As of December 31, 2016, Dr. Wierenga had outstanding options to purchase 91,662 shares of Common Stock, of which 82,963 were exercisable.

We reimburse our non-employee directors for their expenses incurred in connection with attending Board of Directors and committee meetings.

Non-employee directors receive a base retainer for service on the Board of Directors and an additional retainer for each committee on which they serve. Non-employee directors no longer receive per-meeting fees. Annual retainers are as follows:

Annual Base Retainer	Chairman	\$75,000
	Lead outside director (if any)	\$42,500
	Other directors	\$40,000
Committee Chairperson Retainer	Audit Committee	\$20,000
	Compensation and Talent Committee	\$15,000
	Nominating and Governance Committee	\$10,000
	Science and Technology Committee	\$25,000
Committee Member Retainer	Audit Committee	\$10,000
	Compensation and Talent Committee	\$ 7,500
	Nominating and Governance Committee	\$ 5,000
	Science and Technology Committee	\$ 7,500

DIRECTOR COMPENSATION

Each independent outside director may continue to make an annual election to receive his or her annual base retainer in cash or to receive either 50% or 100% of the retainer in stock options. The grant date of the stock options is the first business day of the fiscal calendar year. The number of stock options is calculated at a rate of 2.5 times the cash retainer amount, divided by the closing price of our Common Stock on the date of grant. For example, if a director elects to receive 100% of the retainer in stock options, \$100,000 (2.5 times \$40,000) is divided by the closing stock price on the date of grant to determine the number of stock options. The stock options vest monthly over a one-year vesting period. This election is not available for the committee retainers.

The Company reimburses its non-employee directors for their out-of-pocket expenses incurred in connection with attending Board of Directors and committee meetings.

We have in the past granted non-employee directors options to purchase our Common Stock pursuant to the terms of our 2004 Equity Incentive Plan and our Board of Directors continues to have the discretion to grant options to new and continuing non-employee Directors. In May 2015, our Board of Directors and stockholders, respectively, approved our Amended and Restated 2004 Equity Incentive Plan, which provides for automatic grants of stock options to directors who are not our officers or employees. Effective May 20, 2015, new directors received an initial option grant of 35,000 shares on joining the Board of Directors, and continuing directors received an annual option grant 20,000 shares. Generally, grants to new directors vested monthly over three years and grants to continuing directors vest monthly over one year. Also effective May 20, 2015, the timeframe within which a non-employee director resigning from the Board is able to exercise vested options following the resignation date is extended to one year.

Employee directors who meet the eligibility requirements may participate in our 2015 Employee Stock Purchase Plan.

We maintain director and officer indemnification insurance coverage. This insurance covers directors and officers individually. The policies currently run from June 1, 2016 through June 1, 2017 at a total annual cost of \$421,502. The primary carrier is Old Republic Insurance Company.

**REPORT OF THE AUDIT COMMITTEE
OF THE BOARD OF DIRECTORS**

The Audit Committee operates under a written charter adopted by the Board of Directors and reviewed and approved annually by the Audit Committee. The purpose of the Audit Committee is to:

- Select the Company's independent auditors and oversee the accounting and financial reporting processes of the Company and audits of the financial statements of the Company;
- Assist the Board of Directors in oversight and monitoring of (i) the integrity of the Company's financial statements, (ii) the Company's financial reporting process, (iii) the Company's compliance with legal and regulatory requirements under applicable securities law, (iv) the independent auditors' qualifications, independence and performance, (v) the Company's systems of internal accounting and financial controls, and (vi) other areas of current or potential risk to the Company's finances;
- Provide the Board of Directors with the results of its monitoring and recommendations derived therefrom;
- Prepare a report in the Company's annual proxy statement in accordance with SEC rules; and
- Provide to the Board of Directors such additional information and materials as it may deem necessary to make the Board of Directors aware of significant financial matters that come to its attention and that require the attention of the Board of Directors.

Management has the primary responsibility for the financial statements and the reporting process including the system of internal controls.

In fulfilling its responsibilities during 2016, the Audit Committee has:

- Reviewed and discussed the audited financial statements and the Company's financial reporting processes with management;
- Discussed with the Company's independent registered public accounting firm, PricewaterhouseCoopers LLP, matters required to be discussed under Statements of Auditing Standards No. 1301, *Communications with Audit Committees*, and Statements of Auditing Standards No. 90, *Communication with Audit Committees*;
- Received from PricewaterhouseCoopers LLP written disclosures and a letter regarding their independence as required by the rules of the Public Company Accounting Oversight Board, and discussed with PricewaterhouseCoopers LLP their independence from management and the Company; and
- Discussed with PricewaterhouseCoopers LLP the overall scope and plans for the audit. The Audit Committee met with PricewaterhouseCoopers LLP, with and without management present, to discuss the results of its examinations, its evaluations of the Company's internal controls and the overall quality of the Company's financial reporting.

Based on the foregoing, the Audit Committee recommended to the Board of Directors that the audited financial statements be included in the Company's Annual Report on Form 10-K for the year ended December 31, 2016 for filing with the SEC. The Audit Committee and the Board of Directors have also recommended, subject to stockholder ratification, the selection of PricewaterhouseCoopers LLP as the Company's independent registered public accounting firm for the year ending December 31, 2017.

Respectfully submitted,

MEMBERS OF THE AUDIT COMMITTEE

B. Lynne Parshall
John T. Henderson
Sandford D. Smith

Dated: March 31, 2017

SECTION 16(A) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Exchange Act requires our officers and directors, and persons who own more than ten percent of a registered class of our equity securities, to file reports of ownership and changes in ownership with the SEC. Such officers, directors and ten-percent stockholders are also required by SEC rules to furnish us with copies of all forms that they file pursuant to Section 16(a). Based solely on its review of the copies of such forms received by it, or written representations from certain reporting persons, we believe that during 2016, our executive officers and directors complied with all applicable filing requirements.

CERTAIN BUSINESS RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

Review, Approval or Ratification of Transactions with Related Party

Our policy is that any transaction with a related party that is required to be reported under applicable SEC rules, other than compensation-related matters and waivers of our Code of Ethics, must be reviewed and approved according to an established procedure. Such a transaction is reviewed by the Audit Committee as required by the Audit Committee's charter, and if approved, is then submitted to the full Board of Directors where it is subject to review and approval or ratification by a majority of the independent, disinterested directors. We have not adopted specific standards for approval of these transactions, but instead review each such transaction on a case-by-case basis. Our policy is to require that all such compensation-related matters be reviewed by the Compensation and Talent Committee and, if approved, submitted to the Board of Directors for review and approval. Any waiver of our Code of Ethics must be reviewed by the Nominating and Governance Committee and, if approved, must be reported as required under applicable SEC rules.

Amgen, Inc. ("Amgen")

In December 2006, the Company entered into a collaboration and option agreement with Amgen to discover, develop and commercialize novel small molecule therapeutics, including omecamtiv mecarbil, that activate cardiac muscle contractility for potential applications in the treatment of heart failure (the "Amgen Agreement"). The agreement granted Amgen an option to obtain an exclusive license worldwide, except Japan, to develop and commercialize omecamtiv mecarbil and other drug candidates arising from the collaboration. In May 2009, Amgen exercised its option. As a result, Amgen became responsible for the development and commercialization of omecamtiv mecarbil and related compounds at its expense worldwide (excluding Japan), subject to the Company's development and commercialization participation rights. Amgen reimburses the Company for certain research and development activities it performs under the collaboration.

In June 2013, Cytokinetics and Amgen executed an amendment to the Amgen Agreement to include Japan, resulting in a worldwide collaboration (the "Amgen Agreement Amendment"). Under the terms of the Amgen Agreement Amendment, the Company received a non-refundable upfront license fee of \$15.0 million in June 2013. Under the Amgen Agreement Amendment, the Company conducted a Phase 1 pharmacokinetic study intended to support inclusion of Japan in a potential Phase 3 clinical development program and potential global registration dossier for omecamtiv mecarbil. Amgen reimbursed the Company for the costs of this study. In addition, the Company is eligible to receive additional pre-commercialization milestone payments relating to the development of omecamtiv mecarbil and royalties on sales of omecamtiv mecarbil in Japan.

In conjunction with the Amgen Agreement Amendment, the Company also entered into a common stock purchase agreement which provided for the sale of 1,404,100 shares of its common stock to Amgen at a price per share of \$7.12 and an aggregate purchase price of \$10.0 million, which was received in June 2013. The Company determined the fair value of the stock issued to Amgen to be \$7.5 million. The excess of cash received over fair value of \$2.5 million was initially deferred and allocated between the license and services based on their relative selling prices using best estimate of selling price. The allocated consideration was recognized as revenue as revenue criteria were satisfied, or as services were performed over approximately 12 months. Pursuant to this agreement, Amgen agreed to certain trading and other restrictions with respect to the Company's common stock.

The Company determined that the license to the Japan territory granted under the Amgen Agreement Amendment was a separate, non-contingent deliverable under the amendment. The Company determined that the license has stand-alone value based on Amgen's internal product development capabilities since all relevant manufacturing know-how related to omecamtiv mecarbil was previously delivered to Amgen.

In October 2013, the Company determined that the revenue recognition requirements under ASC 605-10 had been met and accordingly, recognized \$17.2 million in license revenue attributable to the Amgen Agreement Amendment in the fourth quarter of 2013. In year ended December 31, 2014, the Company recognized the remaining \$0.3 million of the previously deferred consideration attributable to the Amgen Agreement Amendment as research and development revenues from related parties.

CERTAIN BUSINESS RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

Amgen and the Company continued the research program in 2016. Under the amended Amgen Agreement, the Company is entitled to receive reimbursements of internal costs of certain full-time employee equivalents during 2016, as well as potential additional milestone payments related to the research activities.

Under the Amgen Agreement, as amended, the Company is eligible to receive over \$300.0 million in additional development milestone payments which are based on various clinical milestones, including the initiation of certain clinical studies, the submission of a drug candidate to certain regulatory authorities for marketing approval and the receipt of such approvals. Additionally, the Company is eligible to receive up to \$300.0 million in commercial milestone payments provided certain sales targets are met. Due to the nature of drug development, including the inherent risk of development and approval of drug candidates by regulatory authorities, it is not possible to estimate if and when these milestone payments would become due. The achievement of each of these milestones is dependent solely upon the results of Amgen's development and commercialization activities. During the year ended December 31, 2016, the Company recognized \$26.7 million in development milestone payments related to the start of GALACTIC-HF, the Phase 3 cardiovascular outcomes clinical trial of omecamtiv mecarbil which is being conducted by Amgen. During the years ended December 31, 2015 and 2014, no revenue for milestones achieved under the Amgen Agreement.

The Amgen Agreement also provides for the Company to receive increased royalties by co-funding Phase 3 development costs of omecamtiv mecarbil and other drug candidates under the collaboration. If the Company elects to co-fund such costs at the \$40.0 million level, it would be entitled to co-promote the co-funded drug in North America and participate in agreed commercialization activities in institutional care settings, at Amgen's expense.

In July 2013, Amgen announced that it had granted an option to commercialize omecamtiv mecarbil in Europe to Servier, with the Company's consent, pursuant to an Option, License and Collaboration Agreement (the "Servier Agreement").

In August 2016, the Company entered into a Letter Agreement with Amgen and Servier (the "Letter Agreement"), which (i) expands the territory of the sublicense to Servier to include specified countries in the Commonwealth of Independent States ("CIS") and (ii) provides that, if Amgen's rights under the Amgen Agreement, as amended, are terminated with respect to the territory of such sublicense, the sublicensed rights previously granted by Amgen to Servier under the Servier Agreement will remain in effect and become a direct license or sublicense of such rights by us to Servier, on substantially the same terms as set forth in the Servier Agreement, including but not limited to Servier's payment of its share of agreed development costs and future milestone and royalty payments to us. The Letter Agreement does not otherwise modify our rights and obligations under the Amgen Agreement, as amended, or create any additional financial obligations of the Company, unless we otherwise agree in writing.

In September 2016, Amgen and Servier announced Servier's decision to exercise its option to commercialize omecamtiv mecarbil in Europe as well as the CIS, including Russia. The option and related commercialization sublicense to Servier is subject to the terms and conditions of the Amgen Agreement. Amgen remains responsible for the performance of its obligations under the Amgen Agreement relating to Europe and the CIS, including the payment of milestones and royalties relating to the development and commercialization of omecamtiv mecarbil in Europe and the CIS.

In December 2016, the Company provided notice of its exercise of its option under the Amgen Agreement to co-invest in the Phase 3 development program of omecamtiv mecarbil at the level of \$10.0 million. In connection with exercising its co-investment option at \$10.0 million, the Company will be eligible to receive an incremental royalty of up to 1% on annual net sales worldwide excluding Japan. The payment of \$10.0 million is due to Amgen in eight quarterly installments with the first payment due at the time of providing notice of the option exercise and is contingent on Amgen continuing the Phase 3 development program of omecamtiv mecarbil. As of December 31, 2016, the Company recorded a payment of \$1.3 million as a reduction in collaboration revenue, related to the option to co-invest in the Phase 3 development program of omecamtiv mecarbil as a reduction of revenue from Amgen, as it concluded the benefit to be received in exchange for the co-investment payment to Amgen, was not sufficiently separable from Amgen Agreement. In February 2017, the Company provided notice of its further exercise of its co-invest option in the additional amount of \$30.0 million (i.e. to fully co-invest \$40.0 million) in the Phase 3 development program of omecamtiv mecarbil.

Pursuant to the Amgen Agreement, the Company has recognized research and development revenue from Amgen for reimbursements of internal costs of certain full-time employee equivalents, supporting a collaborative research program directed to the discovery of next-generation cardiac sarcomere activator compounds and of other costs related to that research program. These reimbursements were recorded as research and development revenues from related parties. During the years ended December 31, 2016, 2015 and 2014, the Company recorded net research and development revenue from Amgen of \$27.9 million, \$2.5 million and \$4.5 million, respectively, under the Amgen Agreement. There were no accounts receivable due from Amgen during the years ended December 31, 2016 and 2015.

CERTAIN BUSINESS RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

Revenue from Amgen was as follows (in thousands):

	Years Ended December 31,		
	2016	2015	2014
Research and development revenues from related parties, net:			
Reimbursement of internal costs	\$ 2,466	\$2,460	\$4,260
Research and development milestone fees	26,666	—	—
Co-invest option payment	(1,250)	—	—
Allocated consideration	—	21	278
Total Research and development revenues from related parties, net	<u>27,882</u>	<u>2,481</u>	<u>4,538</u>
Total net revenues from Amgen	<u>\$27,882</u>	<u>\$2,481</u>	<u>\$4,538</u>

Astellas Pharma, Inc. (“Astellas”)

Original Astellas Agreement (Non-neuromuscular license)

In June 2013, the Company entered into a license and collaboration agreement with Astellas (the “Original Astellas Agreement”). The primary objective of the collaboration with Astellas is to advance novel therapies for diseases and medical conditions associated with muscle weakness.

Under the Original Astellas Agreement, the Company granted Astellas an exclusive license to co-develop and jointly commercialize CK-2127107, a fast skeletal troponin activator, for potential application in non-neuromuscular indications worldwide. The Company was primarily responsible for the conduct of Phase 1 clinical trials and certain Phase 2 readiness activities for CK-2127107 and Astellas was primarily responsible for the conduct of subsequent development and commercialization activities for CK-2127107.

In July 2013, the Company received an upfront, non-refundable license fee of \$16.0 million in connection with the execution of the Original Astellas Agreement. Under the agreement, the Company was eligible to potentially receive over \$24.0 million in reimbursement of sponsored research and development activities during the initial two years of the collaboration. The Original Astellas Agreement also provided for research and early and late stage development milestone payments based on various research and clinical milestones, including the initiation of certain clinical studies, the submission for approval of a drug candidate to certain regulatory authorities for marketing approval and the commercial launch of collaboration products, and royalties on sales of commercialized products.

At the inception of the Original Astellas Agreement, the Company deferred revenue related to the Original Astellas Agreement in accordance with ASC 605-25. The Company evaluated whether the delivered elements under the arrangement have value on a stand-alone basis. Upfront, non-refundable licensing payments are assessed to determine whether or not the licensee is able to obtain stand-alone value from the license. Where this is not the case, the Company does not consider the license deliverable to be a separate unit of accounting, and the revenue for the license fee is deferred and recognized in conjunction with the other deliverables that constitute the combined unit of accounting.

The Company determined that the license and the research and development services are a single unit of accounting as the license was determined to not have stand-alone value. Accordingly, the Company is recognizing this revenue using the proportional performance model over the initial research term of the Original Astellas Agreement. During the years ended December 31, 2016, 2015 and 2014, the Company recorded zero, \$2.3 million and \$9.8 million, respectively, in license revenue based on the proportional performance model under the Original Astellas Agreement. No license revenue remains deferred under the Original Astellas Agreement as of December 31, 2016.

Pursuant to the Original Astellas Agreement, the Company recognized research and development revenue from Astellas for reimbursements of internal costs of certain full-time employee equivalents, supporting collaborative research and development programs, and of other costs related to those programs. During the years ended December 31, 2016, 2015 and 2014, the Company recorded research and development revenue from Astellas of zero, \$3.5 million and \$15.4 million, respectively, under the Original Astellas Agreement.

2014 Astellas Agreement (Expansion to include neuromuscular indications)

In December 2014, the Company entered into an amended and restated license and collaboration agreement with Astellas (the “2014 Astellas Agreement”). This agreement superseded the Original Astellas Agreement. The 2014 Astellas Agreement expanded the objective of the collaboration of advancing novel therapies for diseases and medical conditions associated with muscle weakness to include spinal muscular atrophy (SMA) and potentially other neuromuscular indications for CK-2127107 and other fast skeletal troponin activators, in addition to the non-neuromuscular indications provided for in the Original Astellas Agreement.

CERTAIN BUSINESS RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

Under the 2014 Astellas Agreement, the Company received a non-refundable upfront license fee of \$30.0 million in January 2015. Concurrently, the Company received \$15.0 million as a milestone payment relating to Astellas' decision to advance CK-2127107 into Phase 2 clinical development. Under the 2014 Astellas Agreement, the Company is conducting the initial Phase 2 clinical trial of CK-2127107 in patients with SMA.

The Company determined that the license and the research and development services relating to the 2014 Astellas Agreement are a single unit of accounting as the license was determined to not have stand-alone value. Accordingly, the Company is recognizing this revenue over the research term of the 2014 Astellas Agreement using the proportional performance model.

During the years ended December 31, 2016 and 2015, the Company recorded \$12.1 million and \$11.6 million, respectively, in license revenue based on the proportional performance model under the 2014 Astellas Agreement. No such revenues were recognized during the year ended December 31, 2014. As of December 31, 2016, \$7.2 million license revenue remains deferred under the 2014 Astellas Agreement. Pursuant to the 2014 Astellas Agreement, the Company recognized research and development revenue from Astellas for reimbursements of internal costs of certain full-time employee equivalents, supporting collaborative research and development programs, and of other costs related to those programs. The Company was eligible to potentially receive over \$20.0 million in reimbursement of sponsored research and development activities during the two years of the collaboration following the execution of the 2014 Astellas Agreement. During the years ended December 31, 2016 and 2015, the Company recorded research and development revenue from Astellas of \$13.0 million and \$8.7 million, respectively, under the 2014 Astellas Agreement. No such revenues were recognized during the year ended December 31, 2014.

In conjunction with the 2014 Astellas Agreement, the Company also entered into a common stock purchase agreement which provided for the sale of 2,040,816 shares of its common stock to Astellas at a price per share of \$4.90 and an aggregate purchase price of \$10.0 million which was received in December 2014. Pursuant to this agreement, Astellas agreed to certain trading and other restrictions with respect to the Company's common stock. The Company determined the fair value of the stock issued to Astellas to be \$9.1 million. The excess of cash received over fair value of \$0.9 million was deferred along with the license and research and development services. Allocated consideration will be recognized as revenue for the single unit of accounting above, as services are performed following the proportional performance model over the research term of the 2014 Astellas Agreement. Following the common stock purchase, Astellas was determined to be a related party. As such, all revenue earned following the common stock purchase is classified as related party revenue.

2016 Astellas Amendment (Inclusion of ALS as an Added Indication and Option on Tirasemtiv)

In September 2016, the Company and Astellas executed an amendment (the "2016 Amendment") to expand their collaboration on the research, development and commercialization of skeletal muscle activators under the 2014 Astellas Agreement (collectively, the "Current Astellas Agreement").

Under the 2016 Astellas Amendment, the Company granted Astellas the Option on Tirasemtiv. If Astellas exercises the option, Astellas will receive exclusive worldwide commercialization rights outside of the Company's commercialization territory of North America, Europe and other select countries. Tirasemtiv is the Company's fast skeletal troponin activator being evaluated in the ongoing Phase 3 clinical trial, VITALITY-ALS, in people living with amyotrophic lateral sclerosis ("ALS").

In addition, the 2016 Astellas Amendment expands the Company's collaboration with Astellas to include the development of CK-2127107, a next-generation fast skeletal troponin activator, for the potential treatment of ALS, as well the possible development in ALS of other fast skeletal regulatory activators licensed to Astellas under the 2014 Astellas Agreement ("ALS License"). Finally, the 2016 Astellas Amendment extends the existing joint research program focused on the discovery of additional next-generation skeletal muscle activators through 2017, including sponsored research at Cytokinetics.

Astellas' Option on Tirasemtiv

In connection with the execution of the 2016 Astellas Amendment, the Company received a \$15.0 million non-refundable option fee for the grant of the Option on Tirasemtiv in October 2016. Prior to Astellas' exercise of the option, the Company will continue the development of tirasemtiv, including the VITALITY-ALS trial, at its own expense to support regulatory approval in the U.S., EU and certain other jurisdictions and will retain the final decision making authority on the development of tirasemtiv. If Astellas exercises the option, the Company will grant Astellas an exclusive license to develop and commercialize tirasemtiv outside the Company's own commercialization territory of North America, Europe and other select countries ("License on tirasemtiv") under a tirasemtiv License and Collaboration Agreement ("tirasemtiv License Agreement"). Each party would be primarily responsible for the further development of tirasemtiv in its territory and have the exclusive right to commercialize tirasemtiv in its territory.

CERTAIN BUSINESS RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

If Astellas exercises its option for a global collaboration for the development and commercialization of tirasemtiv, the Company will receive an option exercise payment ranging from \$25.0 million (if exercise occurs following receipt of data from the VITALITY-ALS trial) to \$80.0 million (if exercise occurs following receipt of FDA approval) and a milestone payment of \$30.0 million from Astellas associated with the Company's initiation of the open-label extension trial for tirasemtiv (VIGOR-ALS). The Company will be responsible for the development costs of tirasemtiv during the option period, but if Astellas exercises the option after the defined review period following receipt of data from VITALITY-ALS, Astellas will at the time of option exercise reimburse the Company for a share of any additional costs incurred after such review period.

If Astellas exercises the option for tirasemtiv, the parties will share the future development costs of tirasemtiv in North America, Europe and certain other countries (with Cytokinetics bearing 75% of such shared costs and Astellas bearing 25% of such costs), and Astellas will be solely responsible for the development costs of tirasemtiv specific to its commercialization territory. Contingent upon the successful development of tirasemtiv, the Company may receive milestone payments up to \$100.0 million for the initial indication and up to \$50.0 million for each subsequent indication. If tirasemtiv is commercialized, Astellas will pay the Company royalties (at rates ranging from the mid-teens to twenty percent) on sales of tirasemtiv in Astellas' territory, and the Company will pay Astellas royalties (at rates up to the mid-teens) on sales of tirasemtiv in the Company's territory, in each case subject to various possible adjustments.

The Company concluded that the option to obtain the License on Tirasemtiv is a substantive option, and is therefore not considered a deliverable at the execution of the 2016 Amendment. The Company determined that the Tirasemtiv License Agreement is contingent upon the exercise of the Option on Tirasemtiv, and is therefore not effective during the periods presented, since the option has not been exercised as of the latest balance sheet date. In addition, the Company did evaluate the consideration set to be received for the License on Tirasemtiv in relation to the fair value of the License on tirasemtiv, and determined that it was not being provided at a significant incremental discount.

The Company further determined that the Option Fee of \$15.0 million was deemed to be a prepayment towards the License on tirasemtiv, and therefore deferred revenue recognition either until the option is exercised, or until the option expires unexercised. If the Option on Tirasemtiv expires unexercised, the \$15.0 million receipt would be added to the 2016 Amendment consideration, to be allocated to the units of accounting. The Option on Tirasemtiv expires, if not exercised by Astellas, following the receipt of the approval letter for tirasemtiv from the FDA.

Prior to Astellas' exercise of the option, the Company will continue the development of tirasemtiv, including the VITALITY-ALS trial, at its own expense to support regulatory approval in the U.S., EU and certain other jurisdictions, and the Company has complete discretion to continue to conduct clinical trials, and will retain the final decision making authority on the development of tirasemtiv. Therefore, the Company concluded that there was no obligation related to any development services during the option period.

Addition of ALS as an Added Indication (CK-2127107 and other fast skeletal activators)

In connection with the execution of the 2016 Astellas Amendment, the Company received a non-refundable upfront amendment fee of \$35 million. In addition, the Company received an accelerated \$15.0 million milestone payment that would have been payable upon the initiation of the first Phase 2 clinical trial of CK-2127107 as the lead compound in ALS, as if such milestone had been achieved upon the execution of the 2016 Astellas Amendment.

The Company and Astellas are collaborating to develop CK-2127107 in ALS. Astellas is primarily responsible for the development of CK-2127107 in ALS, but the Company will conduct the Phase 2 clinical trial of CK-2127107 in ALS and will share in the operational responsibility for later clinical trials. Subject to specified guiding principles, decision making will be by consensus, subject to escalation and, if necessary, Astellas' final decision making authority on the development (including regulatory affairs), manufacturing, medical affairs and commercialization of CK-2127107 and other fast skeletal regulatory activators in ALS. The Company and Astellas will share equally the costs of developing CK-2127107 in ALS for potential registration and marketing authorization in the U.S. and Europe, provided that (i) Astellas has agreed to solely fund Phase 2 development costs of CK-2127107 in ALS subject to a right to recoup the Company's share of such costs plus a 100% premium by reducing future milestone and royalty payments to the Company and (ii) the Company may defer (but not eliminate) a portion of its co-funding obligation for development activities after Phase 2 for up to 18 months, subject to certain conditions. The Company has the right to co-fund its share of such Phase 2 development costs on a current basis, in which case there would not be a premium due to Astellas. Cytokinetics will also receive approximately \$41.8 million in additional sponsored research and development funding through 2018 which includes Astellas' funding of Cytokinetics' conduct of the Phase 2 clinical development of CK-2127107 in ALS (approximately \$36.6 million) as well as the continuing research collaboration (approximately \$5.2 million).

Pursuant to the 2016 Astellas Amendment, the Company and Astellas will collaborate to develop CK-2127107 in ALS. Astellas will be primarily responsible for the development of CK-2127107 in ALS, but the Company will conduct the Phase 2

CERTAIN BUSINESS RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

clinical trial of CK-2127107 in ALS and will share in the operational responsibility for later clinical trials. Subject to specified guiding principles, decision making will be by consensus, subject to escalation and, if necessary, Astellas' final decision making authority on the development (including regulatory affairs), manufacturing, medical affairs and commercialization of CK-2127107 and other fast skeletal regulatory activators in ALS.

The Company determined that the deliverables under the 2016 Astellas Amendment included (1) the ALS License, (2) CK-2127107 development services in ALS through Phase 2 activities ("ALS Development Services"), and (3) research services added ("Additional Research Services"). Deliverables that do not provide standalone value have been combined with other deliverables to form a unit of accounting that collectively has standalone value, with revenue being recognized on the combined unit of accounting, rather than the individual deliverables. There are no rights of return provisions for the delivered items in the Current Astellas Agreement.

The Company considered the 2016 Astellas Amendment to be a modification of the 2014 Astellas Agreement. The remaining deliverables under the 2014 Astellas Agreement are: (1) the SMA license; (2) Research Services in connection with the Research Plan (through 2016); and (3) SMA Development Services in connection with the Development Plan. The Company evaluated the components and consideration of the 2016 Astellas Amendment against other Phase 2 collaboration arrangements, and determined that the new 2016 deliverables had standalone value and are delivered at fair value. Therefore no reallocation of consideration to the 2014 deliverables was performed.

The Company concluded that there are two units of accounting; the ALS License, and the Additional Research Services and ALS Development Services ("Research and ALS Development Services"). The Company also determined that the ALS License has standalone value since (1) Astellas received a worldwide license for ALS, to perform further research in the field of ALS, to develop and use CK-2127107 to make, have make, sell or otherwise commercialize CK-2127107 in ALS; (2) Astellas has the right to sublicense the rights to CK-2127107 in ALS to a third party; and (3) Astellas has the technical capabilities to advance further development on CK-2127107 in ALS, without the continued involvement of the Company.

Arrangement Consideration under the 2016 Astellas Amendment related to CK-2127107 and research is comprised of the following (in millions):

	Arrangement Consideration
Amendment Fee	\$35.0
Accelerated milestone payment	15.0
Total Upfront Consideration	50.0
Additional Research Services	5.1
ALS Development Services	39.1
Total Committed Consideration	44.2
Total Consideration	\$94.2

The Company allocated the \$50.0 million in upfront consideration along with the \$44.2 million in then committed research and development consideration, among the two units of accounting, on a relative fair value basis, using the best estimated selling price ("BESP"). The BESP of the ALS License was determined using a discounted cash flow, risk adjusted for probability of success; while the BESP of the research and development services were determined using estimated research and development cost, included in the research and development programs approved by Astellas. Based on this allocation of consideration, the Company stands to recognize \$74.9 million in license revenue and \$19.3 in research and development revenue, under the 2016 Astellas Amendment. Since the upfront consideration of \$50.0 million is less than the allocated consideration of the ALS License, the Company recognized \$50.0 million in license revenue on the Amendment Effective Date, in September 2016, and record the remaining \$24.9 million as an allocation from research and development services, when those services are performed.

Allocation of arrangement consideration, and revenue recognition (in millions):

	Allocated Consideration	Upfront Revenue Recognition	Revenue Recognition over Performance Period
Units of Accounting:			
ALS License	\$74.9	\$50.0	\$24.9
Research and ALS Development Services	19.3	—	19.3
Total consideration	\$94.2	\$50.0	\$44.2

CERTAIN BUSINESS RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

During the year ended December 31, 2016, the Company recorded \$50.1 million in license revenue under the 2016 Astellas Amendment.

The Company will recognize the research and development services using the proportional performance model over the initial development term, through the completion of the ALS Development Services. Pursuant to the 2016 Astellas Amendment, the Company receives payment for research and development revenue from Astellas for reimbursements of internal costs of certain full-time employee equivalents, supporting collaborative research and development programs, and of other costs related to those programs.

During the year ended December 31, 2016, the Company recorded \$0.1 million research and development revenue from Astellas, under the 2016 Astellas Amendment.

The Company believes that each of the milestones related to research under the Current Astellas Agreement is substantive and can only be achieved with the Company's past and current performance and each milestone will result in additional payments to the Company. During the year ended December 31, 2016, the Company recorded \$2.0 million in milestone revenue for research under this agreement, related to the initiation of IND-enabling studies for a fast skeletal troponin activator. The Company is eligible to receive up to \$2.0 million in research milestone payments under the collaboration for each future potential drug candidate.

The achievement of each of the late stage development milestones and the commercialization milestones are dependent solely upon the results of Astellas' development activities and therefore these milestones were not deemed to be substantive.

Under the Current Astellas Agreement, additional research and early and late state development milestone payments which are based on various research and clinical milestones, including the initiation of certain clinical studies, the submission for approval of a drug candidate to certain regulatory authorities for marketing approval and the commercial launch of collaboration products could total over \$600.0 million, including up to \$95.0 million relating to CK-2127107 in non-neuromuscular indications, and over \$100.0 million related to CK-2127107 in each of SMA, ALS and other neuromuscular indications. Additionally, \$200.0 million in commercial milestones could be received under the Current Agreement provided certain sales targets are met. Due to the nature of drug development, including the inherent risk of development and approval of drug candidates by regulatory authorities, it is not possible to estimate if and when these milestone payments could become due.

In the event Astellas commercializes any collaboration products, the Company will receive royalties on sales of such collaboration products, including royalties ranging from the high single digits to the high teens on sales of products containing CK-2127107. Cytokinetics can co-fund certain development costs for CK-2127107 and other compounds in exchange for increased milestone payments and royalties; such royalties may increase under certain scenarios to exceed twenty percent. Under the Current Astellas Agreement, Cytokinetics retains an option to co-promote collaboration products containing fast skeletal muscle activators for neuromuscular indications in the U.S., Canada and Europe, in addition to its option to co-promote other collaboration products in the U.S. and Canada as provided for in the Original Astellas Agreement. Astellas will reimburse Cytokinetics for certain expenses associated with its co-promotion activities.

Research and development revenue from Astellas was as follows (in thousands):

	Year Ended December 31, 2016	Year Ended December 31, 2015	Year Ended December 31, 2014
License Revenues from Related Parties	\$62,171	\$13,918	\$ 9,835
Research and development revenues with related parties:			
Reimbursement of internal costs	6,111	6,210	—
Reimbursement of other costs	6,999	5,974	—
Research and development milestone fees	2,000	—	15,000
Total research and development revenue with related parties from Astellas	<u>\$15,110</u>	<u>\$12,184</u>	<u>\$15,000</u>
Research and development revenues:			
Reimbursement of internal costs	—	—	8,939
Reimbursement of other costs	—	—	6,452
Research and development milestone fees	—	—	2,000
Total research and development revenue from Astellas	<u>—</u>	<u>—</u>	<u>32,391</u>
Total Revenue from Astellas	<u>\$77,281</u>	<u>\$26,102</u>	<u>\$42,226</u>

CERTAIN BUSINESS RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

At December 31, 2016 and December 31, 2015, the Company had \$23.1 million and \$20.4 million, respectively, of deferred revenue under the Current Astellas Agreement, reflecting the unrecognized portion of the license revenue, option fee and payment of expenses. There were no accounts receivable due from Astellas at December 31, 2016 and 2015.

Indemnification of Directors and Officers

The Company provides indemnification for its directors and officers so that they will be free from undue concern about personal liability in connection with their service to the Company. Under the Company's Bylaws, the Company is required to indemnify its directors and officers to the extent not prohibited under Delaware or other applicable law. We have also entered into indemnification agreements with each of our directors and officers, which require us to indemnify its directors and officers to the fullest extent permitted by Delaware law.

HOUSEHOLDING OF PROXY MATERIALS

The SEC has adopted rules that permit companies and intermediaries (e.g., brokers) to satisfy the delivery requirements for Notices of Internet Availability of Proxy Materials or other Annual Meeting materials with respect to two or more stockholders sharing the same address by delivering a single Notice of Internet Availability of Proxy Materials or other Annual Meeting materials 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 Cytokinetics stockholders will be “householding” the Company’s proxy materials. A single Notice of Internet Availability of Proxy Materials 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 they 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 of Internet Availability of Proxy Materials, please notify us or your broker. Direct your written request to Investor Relations, Cytokinetics, Incorporated, 280 East Grand Avenue, South San Francisco, California 94080 or contact Investor Relations at 650-624-3283. Stockholders who currently receive multiple copies of the Notices of Internet Availability of Proxy Materials at their addresses and would like to request “householding” of their communications should contact their brokers.

OTHER MATTERS

The information contained above under the captions “Compensation and Talent Committee Report” and “Report of the Audit Committee of the Board of Directors” shall not be deemed to be soliciting material or to be filed with the SEC, nor shall such information be incorporated by reference into any future filing under the Securities Act of 1933, as amended, or the Exchange Act, except to the extent that we specifically incorporate it by reference into such filing.

We know of no other matters to be submitted to the meeting. If any other matters properly come before the meeting, it is the intention of the persons named in the Proxy to vote the shares they represent as the Board of Directors may recommend.

THE BOARD OF DIRECTORS

Dated: March 31, 2017

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CYTOKINETICS, INCORPORATED
AMENDED AND RESTATED 2004 EQUITY INCENTIVE PLAN
AMENDED BY THE BOARD OF DIRECTORS: FEBRUARY 6, 2013
APPROVED BY STOCKHOLDERS: MAY 22, 2013
AMENDED TO REFLECT THE REVERSE STOCK SPLIT: JUNE 25, 2013
AMENDED AND RESTATED BY THE BOARD OF DIRECTORS: FEBRUARY 3, 2015
APPROVED BY STOCKHOLDERS: MAY 20, 2015
APPROVED BY STOCKHOLDERS: [MAY 18, 2017]

1. PURPOSES OF THE PLAN AND PERMITTED AWARDS.

The purposes of this Plan are to attract and retain the best available personnel for positions of substantial responsibility, to provide additional incentive to Employees, Directors and Consultants, and to promote the success of the Company's business. The Plan permits the grant of Incentive Stock Options, Nonstatutory Stock Options, Restricted Stock, Restricted Stock Units, Stock Appreciation Rights, Performance Units and Performance Shares.

2. SHARES SUBJECT TO THE PLAN.

(a) Shares Subject to the Plan. Subject to adjustments as specified in Section 12 of the Plan, the maximum aggregate number of Shares that may be issued under the Plan is 11,637,190 Shares. The Shares may be authorized, but unissued, or reacquired Stock.

(b) Treatment of Lapsed Awards. To the extent that an Award terminates, expires, or lapses for any reason, any shares of Stock subject to the Award shall again be available for the grant of an Award pursuant to the Plan. Any shares of Stock tendered or withheld to satisfy the grant or exercise price or tax withholding obligation pursuant to any Award shall be treated as issued under this Plan and shall be deducted from the aggregate number of shares which may be issued under Section 2(a). Shares of Stock repurchased on the open market with the proceeds of an exercise price shall not again be available for the grant of an Award pursuant to the Plan. Notwithstanding that a Stock Appreciation Right may be settled by the delivery of a net number of shares of Stock, the full number of shares of Stock underlying such Stock Appreciation Right shall not again be available for the grant of an Award pursuant to the Plan. In addition, no shares of Stock may again be optioned, granted or awarded if such action would cause an Incentive Stock Option to fail to qualify as such under Section 422 of the Code.

(c) Calculation of Share Reserve Under the Fungible Ratio. For purposes of determining the number of shares of Stock issuable or transferred pursuant to Section 2(a), each share of Stock which is issued or transferred pursuant to a Full Value Award (i) prior to May 20, 2015, shall be treated as if two shares of Stock had been so issued or transferred, and (ii) on and after May 20, 2015, shall be treated as if 1.17 shares of Stock had been so issued or transferred. To the extent there is issued a share of Stock pursuant to a Full Value Award that counted as more than one share against the number of shares available for issuance under this Section and such share of Stock again becomes available for issuance under the Plan pursuant to this Section, then the number of shares of Stock available for issuance under the Plan shall increase by (A) two shares of Stock for shares returning prior to May 20, 2015, and (B) 1.17 shares of Stock for shares returning on and after May 20, 2015. To the extent permitted by Applicable Law or any exchange rule, shares of Stock issued in assumption of, or in substitution for, any outstanding awards of any entity acquired in any form of combination by the Company or any Subsidiary shall not be counted against shares of Stock available for grant pursuant to this Plan. The settlement of any Award in cash shall not be counted against the shares available for issuance under the Plan.

(d) Incentive Stock Option Limit. Subject to the provisions of Section 12 relating to capitalization adjustments, the aggregate maximum number of shares of Stock that may be issued pursuant to the exercise of Incentive Stock Options will be 11,637,190 shares of Stock.

(e) Section 162(m) Limitations. Subject to the provisions of Section 12 relating to capitalization adjustments: (i) a maximum of 500,000 shares of Stock subject to Options and SARs (such shares of Stock subject to adjustment to reflect any stock split on or before the effective date of the Plan) whose value is determined by reference to an increase over an exercise or strike price of at least 100% of the Fair Market Value on the date the Award is granted may be granted to any one Participant during any one calendar year, and (ii) a maximum of 500,000 shares of Stock subject to Awards of Performance Units or Awards of Performance Shares may be granted to any one Participant during any one calendar year (whether the grant, vesting or exercise is contingent upon the attainment during the Performance Period of the Performance Goals). If an Award is subject to vesting or exercise contingent on the attainment during the Performance Period of Performance Goals, then such Award will count only against the limit applicable to Awards of Performance Units and Performance Shares. If a Performance Unit could (but is not required to) be paid out in cash, it will count only against the limit applicable to Awards of Performance Shares and Performance Units.

APPENDIX A

(f) Share Reserve. The Company, during the term of this Plan, will at all times reserve and keep available such number of Shares as will be sufficient to satisfy the requirements of the Plan.

3. ADMINISTRATION OF THE PLAN.

(a) Procedure. Unless and until the Board delegates administration to a Committee as set forth below, the Plan shall be administered by the Board. The Board may delegate administration of the Plan to a Committee or Committees of one or more members of the Board. If administration is delegated to a Committee, the Committee shall have the powers theretofore possessed by the Board, including the power to delegate to a subcommittee any of the administrative powers the Committee is authorized to exercise. The Board may designate different Committees to administer the Plan with respect to different groups of Service Providers. To the extent that the Administrator determines it to be desirable to qualify Awards granted hereunder as “**performance-based compensation**” within the meaning of Section 162(m) of the Code, the Plan will be administered by a Committee of two or more “**outside directors**” within the meaning of Section 162(m) of the Code.

(b) Powers of the Administrator. Subject to the provisions of the Plan, and in the case of a Committee, subject to the specific duties delegated by the Board to such Committee, the Administrator will have the authority, in its discretion:

(i) to determine the Fair Market Value;

(ii) to select the Service Providers to whom Awards may be granted hereunder;

(iii) to determine the number of Shares to be covered by each Award granted hereunder and the date of grant; the date of grant of an Award will be, for all purposes, the date on which the Administrator makes the determination granting such Award, or such later date as is determined by the Administrator;

(iv) to approve forms of agreement for use under the Plan;

(v) to determine the terms and conditions, not inconsistent with the terms of the Plan, of any Award granted hereunder. Such terms and conditions include, but are not limited to, the exercise price, the time or times when Awards may be exercised (which may be based on performance criteria), any vesting acceleration or waiver of forfeiture restrictions, and any restriction or limitation regarding any Award or the Shares relating thereto, based in each case on such factors as the Administrator will determine;

(vi) to construe and interpret the terms of the Plan and Awards granted pursuant to the Plan;

(vii) to prescribe, amend and rescind rules and regulations relating to the Plan, including rules and regulations relating to sub-plans established for the purpose of satisfying applicable foreign laws;

(viii) to modify or amend each Award (subject to Section 19(c) of the Plan); *provided, however*, that Board may amend the terms of an Award without the affected Participant’s consent if necessary (A) to maintain the qualified status of the Award as an Incentive Stock Option, (B) to clarify the manner of exemption from, or to bring the Award into compliance with, Section 409A of the Code, or (C) to comply with other Applicable Law;

(ix) to determine the terms and conditions of any, and with the approval of the Company’s stockholders, to institute an Exchange Program;

(x) to authorize any person to execute on behalf of the Company any instrument required to effect the grant of an Award previously granted by the Administrator;

(xi) to allow a Participant to defer the receipt of the payment of cash or the delivery of Shares that would otherwise be due to such Participant under an Award; and

(xii) to make all other determinations deemed necessary or advisable for administering the Plan.

(c) Prohibition Against Repricing. Subject to adjustments made pursuant to Section 14, in no event shall the Administrator have the right to amend the terms of any Award to reduce the exercise price of such outstanding Award or cancel an outstanding Award in exchange for cash or other Awards with an exercise price that is less than the exercise price of the original Award without stockholder approval.

(d) Effect of Administrator’s Decision. The Administrator’s decisions, determinations and interpretations will be final and binding on all Participants and any other holders of Awards.

4. ELIGIBILITY.

Nonstatutory Stock Options, Restricted Stock, Restricted Stock Units, Stock Appreciation Rights, Performance Units and Performance Shares may be granted to Service Providers. Incentive Stock Options may be granted only to Employees.

5. TERMS RELATING TO STOCK OPTIONS AND STOCK APPRECIATION RIGHTS.

Each Option or SAR will be in such form and will contain such terms and conditions as the Board deems appropriate. All Options will be separately designated Incentive Stock Options or Nonstatutory Stock Options at the time of grant, and, if certificates are issued, a separate certificate or certificates will be issued for shares of Stock purchased on exercise of each type of Option. If an Option is not specifically designated as an Incentive Stock Option, or if an Option is designated as an Incentive Stock Option but some portion or all of the Option fails to qualify as an Incentive Stock Option under the applicable rules, then the Option (or portion thereof) will be a Nonstatutory Stock Option. The provisions of separate Options or SARs need not be identical; *provided, however*, that each Award Agreement will conform to (through incorporation of provisions hereof by reference in the applicable Award Agreement or otherwise) the substance of each of the following provisions:

(a) Term of Option. The term of each Option or SAR will be stated in the Award Agreement and will not exceed ten years from the date of grant, except that in the case of an Incentive Stock Option granted to a Participant who is a Ten Percent Stockholder, the term of the Incentive Stock Option may not be more than five years from the date of grant.

(b) Exercise Price. The exercise or strike price of each Option or SAR will be not less than 100% of the Fair Market Value of the Stock on the date the Award is granted, except that for Options or SARs granted to a Ten Percent Stockholder, the exercise or strike price of each Option or SAR will not be less than 110% of the Fair Market Value of the Stock on the date of grant. Notwithstanding the foregoing, an Option or SAR may be granted with an exercise or strike price lower than 100% of the Fair Market Value of the Stock subject to the Award if such Award is granted pursuant to an assumption of or substitution for another option or stock appreciation right pursuant to a Corporate Transaction and in a manner consistent with the provisions of Section 409A and, if applicable, Section 424(a) of the Code. Each SAR will be denominated in shares of Stock equivalents.

(c) Waiting Period and Exercise Dates. At the time an Option or SAR is granted, the Administrator will fix the period within which the Option or SAR may be exercised and will determine the vesting requirements and any other conditions that must be satisfied before the Option or SAR may be exercised.

(d) Exercise of an Option. The Administrator will determine the acceptable method (which may be electronic) and form of consideration for exercising an Option, including the method of payment. Such consideration may include: (i) cash; (ii) check; (iii) promissory note, to the extent permitted by Applicable Laws; (iv) other Shares, provided that such Shares have a Fair Market Value on the date of surrender equal to the aggregate exercise price of the Shares as to which said Option will be exercised and provided that accepting such Shares, in the sole discretion of the Administrator, shall not result in any adverse accounting consequences to the Company; (v) consideration received by the Company under a cashless exercise program implemented by the Company in connection with the Plan; (vi) such other consideration and method of payment for the issuance of Shares to the extent permitted by Applicable Laws; or (vii) any combination of the foregoing methods of payment. In the case of an Incentive Stock Option, the Administrator will specify in the Award Agreement the acceptable forms of consideration.

(e) Exercise and Payment of a SAR. The Administrator will determine the acceptable method (which may be electronic) to exercise any outstanding SAR. The appreciation distribution payable on the exercise of a SAR will be not greater than an amount equal to the excess of (i) the aggregate Fair Market Value (on the date of the exercise of the SAR) of a number of shares of Stock equal to the number of Stock equivalents in which the Participant is vested under such SAR, and with respect to which the Participant is exercising the SAR on such date, over (ii) the strike price. The appreciation distribution may be paid in Stock, in cash, in any combination of the two or in any other form of consideration, as determined by the Board and contained in the Award Agreement evidencing such SAR.

(f) Termination of Relationship as a Service Provider. Except as otherwise provided in the applicable Award Agreement, if a Participant ceases to be a Service Provider, other than for Cause or upon the Participant's death or Disability, any unvested portion of the Option or SAR shall terminate and will revert to the Plan, and the Participant may exercise the vested portion of his or her Option or SAR until the earlier of three months following the Participant's termination, or expiration of the Option or SAR. If the Participant does not exercise his or her Option or SAR within the time specified, the Option or SAR will terminate, and the Shares covered by such Option or SAR will revert to the Plan. In the case of a Participant terminated for Cause, the Option or SAR will terminate immediately upon such Participant's termination as a Service Provider, and the Participant will be prohibited from exercising his or her Option or SAR from and after the date of such termination for Cause.

(g) Disability of Participant. Except as otherwise provided in the applicable Award Agreement, if a Participant ceases to be a Service Provider as a result of the Participant's Disability, any unvested portion of the Option or SAR shall terminate and will revert to the Plan, and the Participant may exercise the vested portion of his or her Option or SAR until the earlier of 12 months following the Participant's termination, or expiration of the Option or SAR. If the Participant does not exercise his or her Option or SAR within the time specified, the Option or SAR will terminate, and the Shares covered by such Option or SAR will revert to the Plan.

APPENDIX A

(h) Death of Participant. Except as otherwise provided in the applicable Award Agreement, if a Participant dies while a Service Provider, any unvested portion of the Option or SAR shall terminate and will revert to the Plan, and the Participant's properly designated beneficiary may exercise the Option or SAR until the earlier of 12 months following Participant's death, or until expiration of the term of such Option or SAR. If no such beneficiary has been designated by the Participant, then such Option or SAR may be exercised by the personal representative of the Participant's estate or by the person(s) to whom the Option or SAR is transferred pursuant to the Participant's will or in accordance with the laws of descent and distribution. If the Option or SAR is not so exercised within the time specified herein, the Award will terminate, and the Shares covered by such Option or SAR will revert to the Plan.

(i) Rights of Holder of Option. Unless otherwise stated in the applicable Award Agreement, an individual holding or exercising an Option or SAR shall have none of the rights of a stockholder (for example, the right to receive cash or dividend payments or distributions attributable to the subject Shares or to direct the voting of the subject Shares) until the Shares covered thereby are fully paid and issued to him. In no case shall an individual holding an Option receive cash or dividend payments or distributions or dividend equivalents attributable to unvested Shares underlying an Option. Except as provided in **Section 12(a)** hereof, no adjustment shall be made for dividends, distributions or other rights for which the record date is prior to the date of such issuance.

6. RESTRICTED STOCK.

(a) Grant of Restricted Stock. The Administrator may grant Shares of Restricted Stock to Service Providers in such amounts as the Administrator, in its sole discretion, will determine.

(b) Restricted Stock Agreement. Each Award of Restricted Stock will be evidenced by an Award Agreement that will specify the Period of Restriction, the number of Shares granted, and such other terms and conditions as the Administrator will determine. Unless the Administrator determines otherwise, Shares of Restricted Stock will be held by the Company as escrow agent until the restrictions on such Shares have lapsed. The Administrator may impose such other restrictions on Shares of Restricted Stock as it may deem advisable or appropriate.

(c) Transferability. Except as provided in this Section 6, Shares of Restricted Stock may not be sold, transferred, pledged, assigned, or otherwise alienated or hypothecated until the end of the applicable Period of Restriction.

(d) Removal of Restrictions. Except as otherwise provided in this Section 6, Shares of Restricted Stock covered by each Restricted Stock grant made under the Plan will be released from escrow as soon as practicable after the last day of the Period of Restriction. The Administrator, in its discretion, may accelerate the time at which any restrictions will lapse or be removed.

(e) Voting Rights. During the Period of Restriction, Service Providers holding Shares of Restricted Stock granted hereunder may exercise full voting rights with respect to those Shares, unless the Administrator determines otherwise.

(f) Dividends and Other Distributions. During the Period of Restriction, Service Providers holding Shares of Restricted Stock will be entitled to receive all dividends and other distributions paid with respect to such Shares unless otherwise provided in the Award Agreement. Any such dividends will be subject to the same restrictions on transferability and forfeitability as the Shares of Restricted Stock with respect to which they were paid. For clarity, Service Providers holding Shares of Restricted Stock shall have the right to vote such Shares and the right to receive any dividends declared or paid with respect to such Shares provided that any such dividends shall be subject to the same vesting restrictions as the underlying Shares subject to the Restricted Stock during the Period of Restriction. Such dividends so accrued with respect to the Shares subject to any Award of Restricted Stock, whether subject to time-based and/or performance-based vesting criteria, shall become payable no earlier than the date the applicable vesting criteria have been satisfied and the Period of Restriction with respect to such Shares has lapsed.

(g) Return of Restricted Stock to Company. On the date set forth in the Award Agreement, the Restricted Stock for which restrictions have not lapsed will revert to the Company and again will become available for grant under the Plan.

7. RESTRICTED STOCK UNITS.

(a) Grant of Restricted Stock Units; Vesting and Other Terms. Restricted Stock Units may be granted to Service Providers at any time with the number of Units to be determined by the Administrator. The Administrator will set service-based or other vesting provisions in its discretion which, depending on the extent to which they are met, will determine the number of Shares to be issued to the Service Providers. Each Award of Restricted Stock Units will be evidenced by an Award Agreement that will specify the vesting schedule, and such other terms and conditions as the Administrator, in its sole discretion, will determine.

(b) Earning of Restricted Stock Units; Form and Timing of Payment. Upon vesting of Restricted Stock Units, the holder thereof will be issued that the number of shares of Stock. Issuance of Shares upon the vesting of Restricted Stock Units will be made as soon as practicable after vesting, but in no event later than the time required to avoid adverse tax consequences under Section 409A of the Code.

(c) Cancellation of Restricted Stock Units. If a holder of Restricted Stock Units terminates service prior to the vesting of all Units or as otherwise provided in an Award Agreement, all unvested Restricted Stock Units will be forfeited and will again be available for grant under the Plan.

(d) Dividend Equivalents. Dividend equivalents may be credited in respect of Shares covered by an Award Agreement covering a Restricted Stock Unit, as determined by the Board and contained in such Award Agreement. At the sole discretion of the Board, such dividend equivalents may be converted into additional shares of Common Stock covered by the Restricted Stock Unit in such manner as determined by the Board. Any additional shares covered by the Restricted Stock Unit credited by reason of such dividend equivalents will be subject to all of the same terms and conditions (including forfeiture restrictions) of the underlying Restricted Stock Unit to which they relate, and such dividend equivalent shall not be paid unless and until the time that the Shares underlying the Restricted Stock Unit are vested and are distributed to the Service Provider.

8. PERFORMANCE UNITS AND PERFORMANCE SHARES.

(a) Grant of Performance Units and Performance Shares. Performance Units and Performance Shares may be granted to Service Providers at any time as determined by the Administrator, in such numbers and subject to such other terms and conditions as determined by the Administrator, in its discretion. For Performance Units or Performance Shares intended to qualify as “performance-based compensation” within the meaning of Section 162(m) of the Code, (i) no Participant will receive Performance Units/Shares having an initial value greater than \$4,000,000, and (ii) no Participant will receive more than 500,000 Performance Units/Shares. Notwithstanding the foregoing limitation, for Performance Units/Shares intended to qualify as “performance-based compensation” within the meaning of Section 162(m) of the Code, in connection with his or her initial service, a Service Provider may be granted up to an additional 500,000 Performance Units/Shares.

(b) Section 162(m) Performance Restrictions. For purposes of qualifying grants of Performance Units/Shares as “performance-based compensation” under Section 162(m) of the Code, the Administrator, in its discretion, may set restrictions based upon the achievement of Performance Goals. The Performance Goals will be set by the Administrator on or before the Determination Date. In granting Performance Units/Shares which are intended to qualify under Section 162(m) of the Code, the Administrator will follow any procedures determined by it from time to time to be necessary or appropriate to ensure qualification of the Award under Section 162(m) of the Code (e.g., in determining the Performance Goals).

(c) Value of Performance Units/Shares. Each Performance Unit will have an initial value that is established by the Administrator on or before the date of grant. Each Performance Share will have an initial value equal to the Fair Market Value of a Share on the date of grant.

(d) Performance Objectives and Other Terms. The Administrator will set performance objectives or other vesting provisions in its discretion which, depending on the extent to which they are met, will determine the number or value of Performance Units/Shares that will be paid out to the Service Providers. Each Award of Performance Units/Shares will be evidenced by an Award Agreement that will specify the Performance Period, and such other terms and conditions as the Administrator will determine. The Administrator may set performance objectives based upon the achievement of Company-wide, divisional, or individual goals, applicable federal or state securities laws, or any other basis determined by the Administrator in its discretion.

(e) Earning of Performance Units/Shares. After the applicable Performance Period has ended, the holder of Performance Units/Shares will be entitled to receive a payout of the number of Performance Units/Shares earned by the Participant over the Performance Period, to be determined as a function of the extent to which the corresponding performance objectives or other vesting provisions have been achieved. After the grant of a Performance Unit/Share, the Administrator, in its sole discretion, may reduce or waive any performance objectives or other vesting provisions for such Performance Unit/Share.

(f) Form and Timing of Payment of Performance Units/Shares. Payment of earned Performance Units/Shares will be made as soon as practicable after the expiration of the applicable Performance Period. The Administrator may pay earned Performance Units/Shares in the form of cash, in Shares (which have an aggregate Fair Market Value equal to the value of the earned Performance Units/Shares at the close of the applicable Performance Period) or in a combination thereof.

(g) Cancellation of Performance Units/Shares. On the date set forth in the Award Agreement, all unearned or unvested Performance Units/Shares will be forfeited and will again be available for grant under the Plan.

APPENDIX A

(h) Dividends and Other Distributions. No cash dividends or distributions declared with respect to Shares subject to the Performance Units/Shares shall be paid to any Participant unless and until the Participant vests in such underlying Performance Units/Shares. Upon the vesting of a Performance Units/Shares, any cash dividends or distributions declared but not paid during the vesting period with respect to such Performance Units/Shares shall be paid to the Participant at the same time or times as the Shares underlying the Performance Units/Shares. Any stock dividends declared on Shares subject to a Performance Units/Shares shall be subject to the same restrictions and shall vest at the same time as the Performance Units/Shares from which said dividends were derived. All unvested dividends shall be forfeited by the Participants to the extent their underlying Performance Units/Shares are forfeited.

9. PERFORMANCE GOALS.

The granting and/or vesting of Awards of Restricted Stock, Restricted Stock Units, Performance Shares and Performance Units and other incentives under the Plan may be made subject to the attainment of performance goals relating to one or more business criteria within the meaning of Section 162(m) of the Code and may provide for a targeted level or levels of achievement ("**Performance Goals**") including, with respect to the Company or any business unit: (a) cash position, (b) clinical progression, (c) collaboration arrangements, (d) collaboration progression, (e) earnings per share, (f) a financing event, (g) net income, (h) operating cash flow, (i) market share, (j) operating expenses, (k) operating income, (l) product approval, (m) product revenues, (n) profit after tax, (o) projects in development, (p) regulatory filings, (q) return on assets, (r) return on equity, (s) revenue growth, and (t) total stockholder return, (u) implementation of, progression in or completion of projects or processes (including, without limitation, progress in research or development programs, progress in regulatory or compliance initiatives, clinical trial initiation, clinical trial enrollment, clinical trial results, new or supplemental indications for existing products, regulatory filing submissions, regulatory filing acceptances, regulatory or advisory committee interactions, regulatory approvals, product supply and systems development and implementation), (v) completion of a joint venture or other corporate transaction, (w) employee retention, (x) budget management and (y) to the extent that an Award is not intended to comply with Section 162(m) of the Code, other measures of performance selected by the Board. Prior to the Determination Date, the Administrator will determine whether any significant element(s) will be included in or excluded from the calculation of any Performance Goal with respect to any Participant. Any Performance Goals may be used to measure the performance of the Company as a whole or a business unit of the Company and may be measured relative to a peer group or index or to another Performance Goal. With respect to any Award, Performance Goals may be used alone or in combination. The Performance Goals may differ from Participant to Participant and from Award to Award. Prior to the Determination Date, the Administrator will determine whether any significant element(s) will be included in or excluded from the calculation of any Performance Goal with respect to any Participant. In all other respects, Performance Goals will be calculated in accordance with the Company's financial statements, generally accepted accounting principles, or under a methodology established by the Administrator prior to the issuance of an Award. In determining the amounts earned by a Participant pursuant to an Award intended to qualified as "performance-based compensation" under Section 162(m) of the Code, the Administrator will have the right to reduce or eliminate (but not to increase) the amount payable at a given level of performance to take into account additional factors that the Administrator may deem relevant to the assessment of individual or corporate performance for the Performance Period. A Participant will be eligible to receive payment pursuant to an Award intended to qualify as "performance-based compensation" under Section 162(m) of the Code for a Performance Period only if the Performance Goals for such period are achieved.

10. LEAVES OF ABSENCE.

Unless the Administrator provides otherwise, vesting of Awards granted hereunder will be suspended during any unpaid leave of absence. A Service Provider will not cease to be an Employee in the case of (a) any leave of absence approved by the Company or (b) transfers between locations of the Company or between the Company, its Parent, or any Subsidiary. For purposes of Incentive Stock Options, no such leave may exceed 90 days, unless reemployment upon expiration of such leave is guaranteed by statute or contract. If reemployment upon expiration of a leave of absence approved by the Company is not so guaranteed, then six months and a day following the 1st day of such leave any Incentive Stock Option held by the Participant will cease to be treated as an Incentive Stock Option and will be treated for tax purposes as a Nonstatutory Stock Option.

11. TRANSFERABILITY OF AWARDS.

Unless determined otherwise by the Administrator, an Award may not be sold, pledged, assigned, hypothecated, transferred, or disposed of in any manner other than by will or by the laws of descent or distribution and may be exercised, during the lifetime of the Participant, only by the Participant. If the Administrator makes an Award transferable, such Award will contain such additional terms and conditions as the Administrator deems appropriate; provided, however, that the

Administrator may only make an Award transferable to one or more of the following: (a) a “family member” (as defined pursuant to Rule 701 of the Securities Act of 1933, as amended) of the Participant; (b) a trust for the benefit of one or more of the Participant or the persons referred to in clause (a); (c) a partnership, limited liability company or corporation in which the Participant or the persons referred to in clause (a) are the only partners, members or stockholders; or (d) charitable donations.

12. ADJUSTMENTS; DISSOLUTION OR LIQUIDATION; MERGER OR CHANGE IN CONTROL.

(a) Adjustments. In order to prevent diminution or enlargement of the benefits or potential benefits intended to be made available under the Plan, in the event that any dividend or other distribution (whether in the form of cash, Shares, other securities, or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, repurchase, or exchange of Shares or other securities of the Company, or other change in the corporate structure of the Company affecting the Shares occurs, the Administrator shall appropriately adjust the number and class of Shares that may be delivered under the Plan and/or the number, class, and price of Shares covered by each outstanding Award, the numerical Share limits as specified throughout the Plan.

(b) Dissolution or Liquidation. In the event of the proposed dissolution or liquidation of the Company, the Administrator will notify each Participant as soon as practicable prior to the effective date of such proposed transaction. To the extent it has not been previously exercised, an Award will terminate immediately prior to the consummation of such proposed action.

(c) Change in Control. In the event of a Change in Control, each outstanding Award will be assumed or an equivalent option or right substituted by the successor corporation or a Parent or Subsidiary of the successor corporation. In the event that the successor corporation refuses to assume or substitute for the Award, the Participant will fully vest in and have the right to exercise all of his or her outstanding Options and SARs, including Shares as to which such Awards would not otherwise be vested or exercisable, all restrictions on Restricted Stock shall lapse, and, with respect to Performance Shares, Restricted Stock Units and Performance Units, all performance goals or other vesting criteria will be deemed achieved at target levels and all other terms and conditions met.

(i) For the purposes of this subsection (c), an Award will be considered assumed if, following the Change in Control, the Award confers the right to purchase or receive, for each Share subject to the Award immediately prior to the Change in Control, the fair market value of the consideration received in the merger or Change in Control by holders of Stock for each Share held on the effective date of the transaction; provided, however, that if such consideration received in the Change in Control is not solely stock of the successor corporation or its Parent, the Administrator may, with the consent of the successor corporation, provide for the consideration to be received to be solely stock of the successor corporation or its Parent equal in fair market value to the per share consideration received by holders of Stock in the Change in Control. The continuation or imposition of vesting terms or other restrictions on Awards in connection with a Change of Control shall not prevent such Awards from being considered assumed for purposes of this Section.

(ii) Notwithstanding the above, an Award that vests, is earned or paid-out upon the satisfaction of one or more performance goals will not be considered assumed if the Company or its successor modifies any of such performance goals without the Participant’s consent; *provided, however*, a modification to such performance goals only to reflect the successor corporation’s post-Change in Control corporate structure will not be deemed to invalidate an otherwise valid Award assumption.

(iii) If an Option or SAR is not assumed or substituted for in the event of a Change in Control, the Administrator will notify the Participant that the Option or SAR will be fully vested and exercisable for a stated period of time prior to the Change of Control, as determined by the Administrator, and the Option or SAR will terminate upon the expiration of such period.

(iv) With respect to Awards granted to an Outside Director that are assumed or substituted for, if on the date of or following such assumption or substitution the Participant’s status as a Director or a director of the successor corporation, as applicable, is terminated other than upon a voluntary resignation by the Participant not at the request of the successor, then the Participant will fully vest in all Awards, and shall have the right to exercise Options and SARs for such periods as provided in the applicable Award Agreement.

13. TAX WITHHOLDING.

(a) Withholding Requirements. Prior to the delivery of any Shares or cash pursuant to an Award (or exercise thereof), the Company will have the power and the right to deduct or withhold, or require a Participant to remit to the Company, an amount sufficient to satisfy federal, state, local, foreign or other taxes (including the Participant’s FICA obligation) required to be withheld with respect to such Award (or exercise thereof).

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(b) Withholding Arrangements. The Administrator, in its sole discretion and pursuant to such procedures as it may specify from time to time, may permit a Participant to satisfy such tax withholding obligation, in whole or in part by (without limitation) (i) paying cash, (ii) electing to have the Company withhold otherwise deliverable cash or Shares having a Fair Market Value equal to the amount required to be withheld, (iii) delivering to the Company already-owned Shares having a Fair Market Value equal to the amount required to be withheld, or (iv) selling a sufficient number of Shares otherwise deliverable to the Participant through such means as the Administrator may determine in its sole discretion (whether through a broker or otherwise) equal to the amount required to be withheld. The amount of the withholding requirement will be deemed to include any amount which the Administrator agrees may be withheld at the time the election is made, not to exceed the amount determined by using the maximum federal, state or local marginal income tax rates applicable to the Participant with respect to the Award on the date that the amount of tax to be withheld is to be determined. The Fair Market Value of the Shares to be withheld or delivered will be determined as of the date that the taxes are required to be withheld.

14. CLAWBACK AND RECOVERY OF AWARDS.

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. In addition, the Board has adopted a clawback policy that allows the Company to seek repayment of incentive compensation that was erroneously paid. The policy provides that if the Board, or Compensation Committee as applicable, determines that there has been a material misstatement of publicly issued financial results from those previously issued to the public due to a knowing violation of rules and regulations of the Securities and Exchange Commission or Company policy, or the willful commission of an act of fraud, dishonesty, gross recklessness or gross negligence, our Board or Compensation Committee will review all incentive compensation made to our named executive officers during the three year period prior to the restatement on the basis of having met or exceeded specific performance targets. If such payments would have been lower had they been calculated based on such restated results, our Board or Compensation Committee will (to the extent permitted by governing law) seek to recoup the payments in excess of the amount that would have been paid based on the restated results.

15. CONDITIONS UPON ISSUANCE OF SHARES.

(a) Legal Compliance. Shares will not be issued pursuant to the exercise of an Award unless the exercise of such Award and the issuance and delivery of such Shares will comply with Applicable Laws and will be further subject to the approval of counsel for the Company with respect to such compliance.

(b) Investment Representations. As a condition to the exercise of an Award, the Company may require the person exercising such Award to represent and warrant at the time of any such exercise that the Shares are being purchased only for investment and without any present intention to sell or distribute such Shares if, in the opinion of counsel for the Company, such a representation is required.

16. AMENDMENT AND TERMINATION OF THE PLAN.

(a) Amendment and Termination. The Administrator may at any time amend, alter, suspend or terminate the Plan. The Company will obtain stockholder approval of any Plan amendment to the extent necessary and desirable to comply with Applicable Laws. Unless earlier terminated or extended, the Plan will continue in effect until May 20, 2025, at which time it shall terminate without further action on the part of the Board or the Company.

(b) Effect of Amendment or Termination. No amendment, alteration, suspension or termination of the Plan will impair the rights of any Participant, without the consent of the Participant. Termination of the Plan will not affect the Administrator's ability to exercise the powers granted to it hereunder with respect to Awards granted under the Plan prior to the date of such termination.

17. MISCELLANEOUS

(a) Not An Employment or Service Contract. Neither the Plan nor any Award will confer upon a Participant any right with respect to continuing the Participant's relationship as a Service Provider with the Company, nor will they interfere in any way with the Participant's right or the Company's right to terminate such relationship at any time, with or without cause, to the extent permitted by Applicable Laws.

(b) Inability to Obtain Authority. The inability of the Company to obtain authority from any regulatory body having jurisdiction, which authority is deemed by the Company's counsel to be necessary to the lawful issuance and sale of any Shares hereunder, will relieve the Company of any liability in respect of the failure to issue or sell such Shares as to which such requisite authority will not have been obtained.

(c) Electronic Delivery. Any reference herein 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).

(d) Compliance with Section 409A of the Code. 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 of the Code, and, to the extent not so exempt, in compliance with Section 409A of the Code. If the Board determines that any Award granted hereunder is not exempt from and is therefore subject to Section 409A of the Code, 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 Stock are publicly traded, and if a Participant holding an Award that constitutes "deferred compensation" under Section 409A of the Code is a "specified employee" for purposes of Section 409A of the Code, no distribution or payment of any amount that is due because of a "separation from service" (as defined in Section 409A of the Code without regard to alternative definitions thereunder) will be issued or paid before the date that is six months following the date of such Participant's "separation from service" (as defined in Section 409A of the Code without regard to alternative definitions thereunder) 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 of the Code, 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.

(e) Choice of Law. The law of the State of Delaware will govern all questions concerning the construction, validity and interpretation of this Plan, without regard to that state's conflict of laws rules.

18. DEFINITIONS.

As used herein, the following definitions will apply:

(a) "Administrator" means the Board or any of its Committees as will be administering the Plan, in accordance with Section 3 of the Plan.

(b) "Affiliate" means, at the time of determination, any "parent" or "subsidiary" of the Company as such terms are defined in Rule 405 of the Securities Act. The Board will have the authority to determine the time or times at which "parent" or "subsidiary" status is determined within the foregoing definition.

(c) "Applicable Law" means the requirements relating to the administration of equity-based awards under U.S. federal and state corporate laws, U.S. federal and state securities laws, the Code, any stock exchange or quotation system on which the Stock is listed or quoted and the applicable laws of any foreign country or jurisdiction where Awards are, or will be, granted under the Plan.

(d) "Award" means, individually or collectively, a grant under the Plan of Options, SARs, Restricted Stock, Restricted Stock Units, Performance Units or Performance Shares.

(e) "Award Agreement" means the written or electronic agreement setting forth the terms and provisions applicable to each Award granted under the Plan. The Award Agreement is subject to the terms and conditions of the Plan.

(f) "Board" means the Board of Directors of the Company.

(g) "Cause" means, in the absence of any written agreement between the Participant and the Company defining such term, with respect to a Participant, the occurrence of any of the following events: (i) such Participant's commission of any felony or any crime involving fraud, dishonesty or moral turpitude under the laws of the United States or any state thereof; (ii) such Participant's attempted commission of, or participation in, a fraud or act of dishonesty against the Company; (iii) 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; (iv) such Participant's unauthorized use or disclosure of the Company's confidential information or trade secrets; or (v) such Participant's gross misconduct. The determination that a termination of the Participant is either for Cause or without Cause will be made by the Company, in its sole discretion. Any determination by the Company that the service of a Participant was terminated with or without Cause for the purposes of outstanding Awards held by such Participant under the Plan will have no effect upon any determination of the rights or obligations of the Company or such Participant for any other purpose.

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(h) **“Change in Control”** means the occurrence of any of the following events:

(i) Any **“person”** (as such term is used in Sections 13(d) and 14(d) of the Exchange Act) becomes the **“beneficial owner”** (as defined in Rule 13d-3 of the Exchange Act), directly or indirectly, of securities of the Company representing fifty percent (50%) or more of the total voting power represented by the Company’s then outstanding voting securities; or

(ii) The consummation of the sale or disposition by the Company of all or substantially all of the Company’s assets;

(iii) A change in the composition of the Board occurring within a two-year period, as a result of which less than a majority of the directors are Incumbent Directors. **“Incumbent Directors”** means directors who either (A) are Directors as of the effective date of the Plan, or (B) are elected, or nominated for election, to the Board with the affirmative votes of at least a majority of the Incumbent Directors at the time of such election or nomination (but will not include an individual whose election or nomination is in connection with an actual or threatened proxy contest relating to the election of directors to the Company); or

(iv) The consummation of a merger or consolidation of the Company with any other corporation, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or its parent) at least fifty percent (50%) of the total voting power represented by the voting securities of the Company or such surviving entity or its parent outstanding immediately after such merger or consolidation.

(i) **“Code”** means the Internal Revenue Code of 1986, as amended. Any reference to a section of the Code will be a reference to any successor or amended section of the Code.

(j) **“Committee”** means a committee of Directors appointed by the Board in accordance with Section 3 of the Plan.

(k) **“Company”** means Cytokinetics, Incorporated, a Delaware corporation, or any successor thereto.

(l) **“Consultant”** means any person, including an advisor, engaged by the Company or a Parent or Subsidiary to render services to such entity.

(m) **“Determination Date”** means the latest possible date that will not jeopardize the qualification of an Award granted under the Plan as “performance-based compensation” under Section 162(m) of the Code.

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

(o) **“Disability”** means total and permanent disability as defined in Section 22(e)(3) of the Code, provided that in the case of Awards other than Incentive Stock Options, the Administrator in its discretion may determine whether a permanent and total disability exists in accordance with non-discriminatory standards.

(p) **“Employee”** means any person employed by the Company or any Parent or Subsidiary of the Company.

(q) **“Exchange Act”** means the Securities Exchange Act of 1934, as amended.

(r) **“Exchange Program”** means a program under which (i) outstanding Awards are surrendered or cancelled in exchange for Awards of the same type (which may have lower exercise prices and different terms), Awards of a different type, and/or cash, (ii) Participants would have the opportunity to transfer any outstanding Awards to a financial institution or other person or entity selected by the Administrator, and/or (iii) the exercise price of an outstanding Award is reduced. The Administrator will determine the terms and conditions of any Exchange Program in its sole discretion, subject to the provisions of Section 4(c).

(s) **“Fair Market Value”** means, as of any date, the value of Stock determined as follows:

(i) If the Stock is listed on any established stock exchange or a national market system, including without limitation the NASDAQ Global Market, the NASDAQ Global Select Market or the NASDAQ Capital Market, its Fair Market Value will be the closing sales price for such stock (or the closing bid, if no sales were reported) as quoted on such exchange or system on the day of determination, as reported in The Wall Street Journal or such other source as the Administrator deems reliable;

(ii) If the Stock is regularly quoted by a recognized securities dealer but selling prices are not reported, the Fair Market Value of a Share of Stock will be the mean between the high bid and low asked prices for the Stock on the day of determination, as reported in The Wall Street Journal or such other source as the Administrator deems reliable; or

(iii) In the absence of an established market for the Stock, the Fair Market Value will be determined in good faith by the Administrator.

(t) **“Fiscal Year”** means the fiscal year of the Company.

(u) **“Full Value Award”** means any Award other than an Option, SAR or other Award for which the Participant pays the intrinsic value (whether directly or by forgoing a right to receive a payment from the Company).

(v) **“Incentive Stock Option”** means an Option intended to qualify as an incentive stock option within the meaning of Section 422 of the Code and the regulations thereunder.

(w) **“Nonstatutory Stock Option”** means an Option that by its terms does not qualify or is not intended to qualify as an Incentive Stock Option.

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

(y) **“Option”** means a stock option granted pursuant to the Plan.

(z) **“Outside Director”** means a Director who is not an Employee.

(aa) **“Parent”** means a **“parent corporation,”** whether now or hereafter existing, as defined in Section 424(e) of the Code.

(bb) **“Participant”** means the holder of an outstanding Award.

(cc) **“Performance Period”** means any Fiscal Year or such other period as determined by the Administrator in its sole discretion.

(dd) **“Performance Share”** or **“Performance Unit”** means an Award granted to a Participant pursuant to Section 8.

(ee) **“Period of Restriction”** means the period during which the transfer of Shares of Restricted Stock are subject to restrictions and therefore, the Shares are subject to a substantial risk of forfeiture. Such restrictions may be based on the passage of time, the achievement of target levels of performance, or the occurrence of other events as determined by the Administrator.

(ff) **“Plan”** means this Amended and Restated 2004 Equity Incentive Plan.

(gg) **“Restricted Stock”** means shares of Stock issued pursuant to a Restricted Stock Award under Section 6 of the Plan, or issued pursuant to the early exercise of an Option.

(hh) **“Restricted Stock Unit”** shall mean a bookkeeping entry representing an amount equal to the Fair Market Value of one Share, granted pursuant to Section 7. Each Restricted Stock Unit represents an unfunded and unsecured obligation of the Company.

(ii) **“Rule 16b-3”** means Rule 16b-3 of the Exchange Act or any successor to Rule 16b-3, as in effect when discretion is being exercised with respect to the Plan.

(jj) **“Section 16(b)”** means Section 16(b) of the Exchange Act.

(kk) **“Service Provider”** means an Employee, Director or Consultant.

(ll) **“Share”** means a share of the Stock, as adjusted in accordance with Section 12 of the Plan.

(mm) **“Stock”** means the Common Stock of the Company.

(nn) **“Stock Appreciation Right”** or **“SAR”** means an Award, granted alone or in connection with an Option, that pursuant to Section 5 is designated as a SAR.

(oo) **“Subsidiary”** means a **“subsidiary corporation,”** whether now or hereafter existing, as defined in Section 424(f) of the Code.

(pp) **“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.

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