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

SCHEDULE 14A INFORMATION

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

Filed by the Registrant

Filed by a Party other than the Registrant

Check the appropriate box:

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

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

Payment of Filing Fee (Check the appropriate box)

- No fee required.
- Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.

1. Title of each class of securities to which transaction applies:

2. Aggregate number of securities to which transaction applies:

3. Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):

4. Proposed maximum aggregate value of transaction:

5. Total fee paid:

Fee paid previously with preliminary materials.

Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.

1. Amount Previously Paid:

2. Form, Schedule or Registration Statement No.:

3. Filing Party:

4. Date Filed:

REGULUS THERAPEUTICS INC.

10614 Science Center Drive
San Diego, California 92121

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS

To Be Held On June 1, 2018

Dear Stockholder:

You are cordially invited to attend the 2018 Annual Meeting of Stockholders of Regulus Therapeutics Inc., a Delaware corporation (the "Company"). The meeting will be held on Friday, June 1, 2018 at 9:00 a.m. local time at the Company's principal executive offices located at 10614 Science Center Drive, San Diego, CA 92121 for the following purposes:

1. To elect the seven nominees for director named herein to serve until the next annual meeting and their successors are duly elected and qualified.
2. To approve, on an advisory basis, the compensation of the Company's named executive officers, as disclosed in the Proxy Statement accompanying this notice;
3. To indicate, on an advisory basis, the preferred frequency of stockholder advisory votes on the compensation of the Company's named executive officers;
4. To ratify the selection by the Audit Committee of the Board of Directors of Ernst & Young LLP as the independent registered public accounting firm of the Company for its fiscal year ending 2018; and
5. To conduct any other business properly brought before the meeting.

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

The record date for the annual meeting is April 6, 2018. Only stockholders of record at the close of business on that date may vote at the meeting or any adjournment thereof.

Important Notice Regarding the Availability of Proxy Materials for the Stockholders' Meeting to Be Held on June 1, 2018 at 9:00 a.m. local time at the Company's offices located at 10614 Science Center Drive, San Diego, CA 92121.

The proxy statement and annual report to stockholders are available at www.regulusrx.com.

By Order of the Board of Directors



Christopher Aker
Corporate Secretary

San Diego, California
April 20, 2018

You are cordially invited to attend the meeting in person. Whether or not you expect to attend the meeting, please complete, date, sign and return the proxy mailed to you or vote by telephone or through the internet as instructed in these materials, as promptly as possible in order to ensure your representation at the meeting. Even if you have voted by proxy, you may still vote in person if you attend the meeting. Please note, however, that if your shares are held of record by a broker, bank or other nominee and you wish to vote at the meeting, you must obtain a proxy issued in your name from that record holder.

REGULUS THERAPEUTICS INC.

10614 Science Center Drive
San Diego, California 92121

**PROXY STATEMENT
FOR THE 2018 ANNUAL MEETING OF STOCKHOLDERS**

To be held on June 1, 2018

QUESTIONS AND ANSWERS ABOUT THESE PROXY MATERIALS AND VOTING

Why did I receive a notice regarding the availability of proxy materials on the internet, rather than a full set of proxy materials?

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 (a "Notice") because the Board of Directors (sometimes referred to as the "Board") of Regulus Therapeutics Inc. (sometimes referred to as "we," "us," the "Company" or "Regulus") is soliciting your proxy to vote at our 2018 Annual Meeting of Stockholders, 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.

The Notice is expected to first be mailed to our stockholders of record entitled to vote at the annual meeting on April 20, 2018.

Will I receive any other proxy materials by mail?

We may send you a proxy card, along with a second Notice, on or after April 30, 2018.

How do I attend the annual meeting?

The meeting will be held on Friday, June 1, 2018 at 9:00 a.m. local time at 10614 Science Center Drive, San Diego, California 92121. Directions to the annual meeting may be found at www.regulusrx.com. Information on how to vote in person at the annual meeting is discussed below.

Who can vote at the annual meeting?

Only stockholders of record at the close of business on April 6, 2018 will be entitled to vote at the annual meeting. On this record date, there were 104,319,552 shares of common stock outstanding and entitled to vote.

Stockholder of Record: Shares Registered in Your Name

If on April 6, 2018 your shares were registered directly in your name with the Company's transfer agent, Computershare, then you are a stockholder of record. As a stockholder of record, you may vote in person at the meeting or vote by proxy. Whether or not you plan to attend the meeting, we urge you to vote by proxy to ensure your vote is counted.

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

If on April 6, 2018 your shares were held, not in your name, but rather in an account at a brokerage firm, bank, dealer or other similar organization, then you are the beneficial owner of shares held in "street name" and received a Notice from that organization. The organization holding your account is considered to be the

stockholder of record for purposes of voting at the annual meeting. As a beneficial owner, you have the right to direct your broker or other agent regarding how to vote the shares in your account. You are also invited to attend the annual meeting. However, since you are not the stockholder of record, you may not vote your shares in person at the meeting unless you request and obtain a valid proxy from your broker or other agent.

What am I voting on?

There are four matters scheduled for a vote:

- Election of the seven nominees for director named herein;
- To approve, on an advisory basis, the compensation of the Company's named executive officers, as disclosed in this Proxy Statement;
- To indicate, on an advisory basis, the preferred frequency of stockholder advisory votes on the compensation of the Company's named executive officers; and
- Ratification of the selection by the Audit Committee of the Board of Directors of Ernst & Young LLP as the independent registered public accounting firm of the Company for its fiscal year ending 2018.

What if another matter is properly brought before the meeting?

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

How do I vote?

You may either vote "For" all the nominees to the Board of Directors or you may "Withhold" your vote for any nominee you specify. With regard to your advisory vote on how frequently we should solicit stockholder advisory approval of executive compensation, you may vote for any one of the following: one year, two years or three years, or you may abstain from voting on that matter. For all other matters, you may vote "For" or "Against" or abstain from voting.

The procedures for voting are fairly simple:

Stockholder of Record: Shares Registered in Your Name

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

- To vote using a proxy card that may be delivered to you at a later time, simply complete, sign and date the proxy card and return it promptly in the envelope provided. If you return your signed proxy card to us before the annual meeting, we will vote your shares as you direct.
- To vote over the telephone, dial toll-free 1-800-652-8683 using a touch-tone phone and follow the recorded instructions. You will be asked to provide the company number and control number from the Notice. Your vote must be received by 1:00 a.m. Pacific Time on June 1, 2018 to be counted.
- To vote through the internet, go to www.investorvote.com/RGLS to complete an electronic proxy card. You will be asked to provide the company number and control number from the Notice. Your vote must be received by 1:00 a.m. Pacific Time on June 1, 2018 to be counted.
- To vote in person, come to the annual meeting and we will give you a ballot when you arrive.

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

If you are a beneficial owner of shares registered in the name of your broker, bank, or other agent, you should have received a Notice containing voting instructions from that organization rather than from Regulus. Simply follow the instructions in the Notice to ensure that your vote is counted. To vote in person at the annual meeting, you must obtain a valid proxy from your broker, bank or other agent. Follow the instructions from your broker or bank included with these proxy materials, or contact your broker or bank to request a proxy form.

How many votes do I have?

On each matter to be voted upon, you have one vote for each share of common stock you owned as of April 6, 2018.

What happens if I do not vote?

Stockholder of Record: Shares Registered in Your Name

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

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

If you are a beneficial owner and do not instruct your broker, bank, or other agent how to vote your shares, the question of whether your broker or nominee will still be able to vote your shares depends on whether the particular proposal is considered to be a routine matter under applicable rules. Brokers and nominees can use their discretion to vote uninstructed shares with respect to matters that are considered to be routine under applicable rules, but not with respect to non-routine matters. Under applicable rules and interpretations, non-routine matters are matters that may substantially affect the rights or privileges of stockholders, such as mergers, stockholder proposals, elections of directors (even if not contested), executive compensation (including any advisory stockholder votes on executive compensation and on the frequency of stockholder votes on executive compensation), and certain corporate governance proposals, even if management-supported. Accordingly, your broker or nominee may not vote your shares on Proposals 1, 2 or 3 without your instructions, but may vote your shares on Proposal 4.

What if I return a proxy card or otherwise vote but do not make specific choices?

If you return a signed and dated proxy card or otherwise vote without marking voting selections, your shares will be voted, as applicable, “For” the election of all seven nominees for director, “For” the approval of the stockholder advisory vote on the compensation of our Named Executive Officers as described in Proposal 2, for “One Year” as the preferred frequency for soliciting advisory stockholder approval of the compensation of our Named Executive Officers as described in Proposal 3, and “For” ratification of the selection by the Audit Committee of the Board of Ernst & Young LLP as the independent registered public accounting firm of the Company for its fiscal year ending 2018. If any other matter is properly presented at the meeting, your proxyholder (one of the individuals named on your proxy card) will vote your shares using his or her best judgment.

Who is paying for this proxy solicitation?

We will pay for the entire cost of soliciting proxies. In addition to these proxy materials, our directors and employees and Computershare 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 Computershare will be paid its customary fee of approximately \$10,000.00 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.

What does it mean if I receive more than one set of proxy materials?

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

Can I change my vote after submitting my proxy?

Stockholder of Record: Shares Registered in Your Name

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

- You may submit a properly completed proxy card with a later date.
- You may grant a subsequent proxy by telephone or through the internet
- You may send a timely written notice that you are revoking your proxy to Regulus Therapeutics Inc.'s Secretary at its principal executive offices located at 10614 Science Center Drive, San Diego, California 92121.
- You may attend the annual meeting and vote in person. Simply attending the meeting will not, by itself, revoke your proxy.

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

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

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

When are stockholder proposals and director nominations due for next year's annual meeting?

To be considered for inclusion in the Company's proxy materials for next year's annual meeting of stockholders, your proposal must be submitted in writing by December 21, 2018 to the attention of the Secretary of Regulus Therapeutics Inc. at 10614 Science Center Drive, San Diego, California 92121. If you wish to submit a proposal (including a director nomination) at the meeting that is not to be included in the Company's proxy materials for next year's annual meeting, your written request must be received by the Secretary for Regulus Therapeutics Inc. at 10614 Science Center Drive, San Diego, California 92121 between February 1, 2019 and March 3, 2019. You are also advised to review the Company's Bylaws, which contain additional requirements about advance notice of stockholder proposals and director nominations.

How are votes counted?

Votes will be counted by the inspector of election appointed for the meeting, who will separately count, for the proposal to elect directors, votes "For," "Withhold" and broker non-votes; with respect to the proposal regarding frequency of stockholder advisory votes to approve executive compensation, votes for frequencies of one year, two years or three years, abstentions and broker non-votes, and with respect to the other proposals, votes "For" and "Against," abstentions and, if applicable, broker non-votes. Abstentions will be counted towards the vote total for Proposals 2 and 4 and will have the same effect as "Against" votes. For Proposal 3, abstentions will be counted towards the vote total, and will have the same effect as votes "Against" each of the proposed voting frequencies. Broker non-votes will have no effect and will not be counted towards the vote total for any proposal.

What are "broker non-votes"?

As discussed above, when a beneficial owner of shares held in "street name" does not give instructions to the broker or nominee holding the shares as to how to vote on matters deemed to be non-routine under applicable rules, the broker or nominee may not vote the shares. These unvoted shares are counted as "broker non-votes."

How many votes are needed to approve each proposal?

- For Proposal 1, regarding the election of directors, the seven nominees receiving the most “For” votes from the holders of shares present in person or represented by proxy and entitled to vote on the election of directors will be elected. Only votes “For” will affect the outcome. However, if the number of votes “For” any of the seven nominees does not exceed a majority of the total number of votes cast (excluding abstentions and broker non-votes) with respect to such nominee’s election (from the holders of votes of shares either present in person or represented by proxy and entitled to vote), such nominee will promptly tender his or her resignation as a director, and the Nominating and Corporate Governance Committee of the Board will make a recommendation to the Board as to whether to accept or reject such director’s resignation.
- To be approved, Proposal 2, regarding the approval on an advisory basis of the compensation paid to the Company’s named executive officers, must receive “For” votes from the holders of a majority of shares present and entitled to vote either in person or represented by proxy. If you mark your proxy to “Abstain” from voting, it will have the same effect as an “Against” vote.
- For Proposal 3, regarding the advisory vote on the preferred frequency voting on the compensation paid to the Company’s named executive officers, the frequency receiving the highest number of affirmative votes of the shares represented in person or by proxy and entitled to vote on the item will be considered the frequency preferred by the stockholders. If you mark your proxy to “Abstain” from voting, it will only be counted for the purposes of determining the number of shares represented in person or by proxy at the annual meeting.
- To be approved, Proposal 4, regarding the ratification of the selection by the Audit Committee of the Board of Directors of Ernst & Young LLP as the independent registered public accounting firm of the Company for its fiscal year ending 2018, must receive “For” votes from the holders of a majority of shares present and entitled to vote either in person or represented by proxy. If you mark your proxy to “Abstain” from voting, it will have the same effect as an “Against” vote

What is the quorum requirement?

A quorum of stockholders is necessary to hold a valid meeting. A quorum will be present if stockholders holding at least a majority of the outstanding shares entitled to vote are present at the meeting in person or represented by proxy. On the record date, there were 104,319,552 shares outstanding and entitled to vote. Thus, the holders of 52,159,777 shares must be present in person or represented by proxy at the meeting to have a quorum.

Your shares will be counted towards the quorum only if you submit a valid proxy (or one is submitted on your behalf by your broker, bank or other nominee) or if you vote in person at the meeting. Abstentions and broker non-votes will be counted towards the quorum requirement. If there is no quorum, the holders of a majority of shares present at the meeting in person or represented by proxy may adjourn the meeting to another date.

How can I find out the results of the voting at the annual meeting?

Preliminary voting results will be announced at the annual meeting. In addition, final voting results will be published in a current report on Form 8-K that we expect to file within four business days after the annual meeting. If final voting results are not available to us in time to file a Form 8-K within four business days after the meeting, we intend to file a Form 8-K to publish preliminary results and, within four business days after the final results are known to us, file an additional Form 8-K to publish the final results.

What proxy materials are available on the internet?

The letter to stockholders, proxy statement, Form 10-K and annual report to stockholders are available at www.regulusrx.com.

PROPOSAL 1

ELECTION OF DIRECTORS

Our Board of Directors currently consists of eight directors. There are seven nominees for director this year, consisting of our incumbent directors other than Mark Foletta, who we did not nominate for reelection at the annual meeting as a result of his preference to retire from the Board at the end of his current term. We intend to reduce the authorized size of our Board of Directors from eight to seven directors on or shortly following the date of the annual meeting. Each director to be elected and qualified will hold office until the next annual meeting of stockholders and until his or her successor is elected, or, if sooner, until the director's death, resignation or removal. Each of the nominees listed below is currently a director of the Company who was previously elected by the stockholders, other than Ms. Collier who was appointed as a director by the Board in April 2018. Directors are elected by a plurality of the votes of the holders of shares present in person or represented by proxy and entitled to vote on the election of directors. The seven nominees receiving the highest number of affirmative votes will be elected. Pursuant to the Company's Corporate Governance Principles, if the number of votes "For" any of the seven nominees does not exceed a majority of the total number of votes cast (excluding abstentions and broker non-votes) with respect to such nominee's election (from the holders of votes of shares either present in person or represented by proxy and entitled to vote), such nominee will promptly tender his or her resignation as a director, and the Nominating and Corporate Governance Committee of the Board will make a recommendation to the Board as to whether to accept or reject such director's resignation. The Board may accept or reject the resignation in its discretion. Shares represented by executed proxies will be voted, if authority to do so is not withheld, for the election of the seven nominees named below. If any nominee becomes unavailable for election as a result of an unexpected occurrence, your shares may be voted for the election of a substitute nominee proposed by Regulus. Each person nominated for election has agreed to serve if elected. The Company's management has no reason to believe that any nominee will be unable to serve.

It is the Company's policy to invite nominees for directors to attend the annual meeting. None of our current directors attended our 2017 Annual Meeting of Stockholders, except for Mr. Hagan.

Nominees

The following is a brief biography of each nominee for director and a discussion of the specific experience, qualifications, attributes or skills of each nominee that led the Nominating and Corporate Governance Committee to recommend that person as a nominee for director, as of the date of this proxy statement.

The Nominating and Corporate Governance Committee seeks to assemble a Board that, as a whole, possesses the appropriate balance of professional and industry knowledge, financial expertise and high-level management experience necessary to oversee and direct the Company's business. To that end, the Nominating and Corporate Governance Committee has identified and evaluated nominees in the broader context of the Board's overall composition, with the goal of recruiting members who complement and strengthen the skills of other members and who also exhibit integrity, collegiality, sound business judgment and other qualities that the Nominating and Corporate Governance Committee views as critical to effective functioning of the Board. The brief biographies below include information, as of the date of this proxy statement, regarding the specific and particular experience, qualifications, attributes or skills of each director or nominee that led the Nominating and Corporate Governance Committee to recommend that person as a nominee. However, each of the members of the Nominating and Corporate Governance Committee may have a variety of reasons why he or she believes a particular person would be an appropriate nominee for the Board, and these views may differ from the views of other members.

Name	Age	Position Held With the Company
Dr. Stelios Papadopoulos	69	Chairman of the Board of Directors
Kathryn J. Collier	50	Director
Dr. David Baltimore	80	Director
Mr. Joseph P. Hagan	49	Director, President and Chief Executive Officer
Dr. William H. Rastetter	70	Director
Dr. Hugh Rosen	59	Director
Ms. Pascale Witz, MBA, MSc	51	Director

Stelios Papadopoulos, Ph.D. Chairman of the Board, has served on our Board of Directors since our conversion to a corporation in January 2009 and as our Chairman since June 2013, and prior to that was a director of Regulus Therapeutics LLC since July 2008. Since 1994, Dr. Papadopoulos has served as a director and, since 1998, as Chairman of the Board for Exelixis, Inc., a publicly held biotechnology company, which he co-founded. Since July 2008, Dr. Papadopoulos has served as a member of the board of directors of Biogen Inc. (formerly Biogen Idec Inc.), a publicly held biopharmaceutical company, and has served as its chairman of the board of directors since June 2014. Since 2003, Dr. Papadopoulos has served as a member of the board of directors of BG Medicine, Inc., a publicly held life sciences company. From 2000 to 2006, Dr. Papadopoulos served as Vice Chairman with Cowen and Co., LLC, an investment banking firm. From 1987 to 2000, Dr. Papadopoulos served in several positions with PaineWebber, Incorporated, most recently as Chairman of PaineWebber Development Corp., a PaineWebber subsidiary focusing on biotechnology. Dr. Papadopoulos holds an M.S. in Physics, a Ph.D. in Biophysics and an MBA in Finance from New York University. Our Nominating and Corporate Governance Committee believes that Dr. Papadopoulos is qualified to serve on our Board of Directors due to his knowledge and expertise regarding the biotechnology and healthcare industries, his broad leadership experience on various boards and his experience with financial matters.

David Baltimore, Ph.D. has served on our Board of Directors since our conversion to a corporation in January 2009, and prior to that was a director of Regulus Therapeutics LLC since November 2007. Since 2006, Dr. Baltimore has served as President Emeritus and Robert Andrews Millikan Professor of Biology at the California Institute of Technology, and before that from 1997 to 2006, Dr. Baltimore served as President of the California Institute of Technology. From 1968 to 1972, Dr. Baltimore served as an associate professor at the Massachusetts Institute of Technology, and from 1972 to 1997 was a professor at the Massachusetts Institute of Technology. From 1990 to 1994, Dr. Baltimore served as professor at The Rockefeller University where he also served as the President from July 1990 to December 1991. Since 1997, Dr. Baltimore has served as a director of Amgen Inc., a publicly held biotechnology company, and also serves as a director of Immune Design Corp., a publicly held biotechnology company. In 1975, Dr. Baltimore received the Nobel Prize in Medicine as a co-recipient. Dr. Baltimore holds a Ph.D. in Biology from The Rockefeller University and a B.A. with High Honors in Chemistry from Swarthmore College. Our Nominating and Corporate Governance Committee believes that Dr. Baltimore is qualified to serve on our Board of Directors due to the many years Dr. Baltimore has spent in scientific academia, which has provided him with a deep understanding of our industry and our activities.

Kathryn J. Collier has served on our Board of Directors since April 2018. Ms. Collier presently serves as the Vice President and Treasurer for Sempra Energy, a publicly-traded energy services holding company whose subsidiaries provide electricity, natural gas and value-added products and services. In this position, Ms. Collier oversees the treasury function at Sempra Energy, including mergers and acquisitions, corporate and project financing, cash management, pension and trust investments, rating agency relationships, as well as major project control activities. Prior to joining Sempra Energy in 2012, Ms. Collier held several executive positions within global corporate and investment banking at Bank of America Merrill Lynch. Ms. Collier currently serves on the boards of two Sempra electric utility subsidiaries: Luz del Sur, based in Lima, Peru, and Chilquinta Energia, based in Valparaiso, Chile. Ms. Collier holds a bachelor's degree in accounting from Valparaiso University, Valparaiso, Indiana. Our Nominating and Corporate Governance Committee believes that Ms. Collier is qualified to serve on our Board of Directors due to her extensive financial and operational experience, her experience in investment banking and her corporate governance experience with various boards.

Joseph “Jay” Hagan has served as our President and Chief Executive Officer and principal executive officer since May 2017. Mr. Hagan previously served as our Chief Operating Officer, principal financial officer and principal accounting officer from January 2016 to May 2017. From June 2011 through December 2015, Mr. Hagan served as the Executive Vice President, Chief Financial Officer and Chief Business Officer of Orexigen Therapeutics, Inc. From May 2009 to June 2011, Mr. Hagan served as Orexigen’s Senior Vice President, Corporate Development, Strategy and Communications. From September 1998 to April 2008, Mr. Hagan served as Managing Director of Amgen Ventures. Prior to starting the Amgen Ventures Fund, Mr. Hagan served as Head of corporate development for Amgen Inc. Before joining Amgen, Mr. Hagan spent five years in the bioengineering labs at Genzyme and Advanced Tissue Sciences. Mr. Hagan has served on the board of directors of Zosano Pharma, a publicly traded biotechnology company, since May 2015. He received an M.B.A. from Northeastern University and a B.S. in Physiology and Neuroscience from the University of California, San Diego. Our Nominating and Governance Committee believes that Mr. Hagan’s expertise in business development, commercialization and financing of public companies qualify him to serve on our Board of Directors.

William H. Rastetter, Ph.D. has served on our Board of Directors since April 2013. From 2006 to February 2013, Dr. Rastetter served as a partner in the venture capital firm, Venrock. He served as Chief Executive Officer of IDEC Pharmaceuticals from December 1986 through November 2003, and as Chairman from May 1996 to November 2003. Upon the merger of IDEC Pharmaceuticals and Biogen in November 2003, Dr. Rastetter served as Executive Chairman of Biogen Idec until the end of 2005. Dr. Rastetter served as chairman of the board of Illumina, Inc., a publicly held biotechnology company, from 2005 to January 2016 and served on its board of directors from 1998 to January 2016. He was a founder of Receptos, Inc. in 2009 and served as its chairman until the sale of the publicly held company to Celgene in 2015. Currently, he has served as the chairman of the board of directors of Fate Therapeutics, Inc., a publicly held biotechnology company, since November 2011; chairman of the board of directors of Neurocrine Biosciences, Inc., a publicly held biotechnology company, since May 2011 and on its board of directors since February 2010; on the board of directors of Grail, Inc., a privately-held company, since January 2016, and as its chairman since August 2017. Dr. Rastetter served on the board of directors of Cerulean Pharma Inc., a publicly held biotechnology company since January 2014, as its lead independent director from April 2014 to June 2016, and as its chairman from June 2016 until July 2017 when Cerulean and Daré Bioscience Inc. completed a reverse merger and he currently serves on the board of the surviving company, Daré Bioscience Inc., a publicly-traded company. In addition, he serves as an advisor to Leerink Partners, a healthcare-focused investment bank, and as an advisor to Illumina Ventures, and on the board of trustees of Caltech. He is the author of numerous scientific papers and patent applications in the fields of organic and bioorganic chemistry, protein and enzyme engineering, and biotechnology. Dr. Rastetter holds an S.B. in Chemistry from the Massachusetts Institute of Technology and received his M.A. and Ph.D. in Chemistry from Harvard University. Our Nominating and Corporate Governance Committee believes that Dr. Rastetter’s knowledge and expertise regarding the biotechnology industry and his leadership experience on various biotechnology company boards of directors qualifies him to serve on our Board of Directors.

Hugh Rosen, M.D., Ph.D. has served on our Board of Directors since June 2016. Since April 2017, Dr. Rosen has served as the President and Chairman of the Board of Activx Biosciences, Inc., a wholly owned biopharmaceutical subsidiary of Kyorin Pharmaceutical Co., Ltd. From 2002 until March 2017, Dr. Rosen served as a Professor of Chemical Physiology at The Scripps Research Institute (TSRI) in La Jolla, California where he focused on pursuing his primary interests in lymphocyte trafficking and barrier regulation by signaling lipids, and contributing towards the development of translational infrastructure at TSRI. He also served as Chairman of the Committee for Advanced Human Therapeutics of TSRI. Prior to joining The Scripps Research Institute, Dr. Rosen served in various capacities with Merck Research Laboratories most recently serving as Executive Director in Immunology, Rheumatology and Infectious Diseases and Chair of the Worldwide Business Strategy Team for Antibacterials and Antifungals, reporting to the Management Committee. Dr. Rosen was a scientific founder of Receptos, Inc., now a wholly owned biopharmaceutical subsidiary of Celgene Corporation, and currently serves on the Receptos Scientific Advisory Board. He received his M.D. from the University of Cape Town, South Africa and his Ph.D. in Physiological Sciences from Oxford. Our Nominating and Corporate

Governance Committee believes that Dr. Rosen is qualified to serve on our Board of Directors due to the many years Dr. Rosen has spent in scientific academia as well as the biopharmaceutical industry, which has provided him with a deep understanding of our industry and our activities.

Pascale Witz, MBA, MSc has served on our Board of Directors since June 2017. From September 2015 through May 2016, Ms. Witz served as the Executive Vice President, Diabetes & Cardiovascular for Sanofi, S.A. Prior to that position, Ms. Witz served as the Executive Vice President, Global Divisions and Strategic Development, commencing in July 2013. Commencing in 1996, Ms. Witz was employed in positions of increasing responsibility with GE Healthcare, most recently serving as the President and CEO of Medical Diagnostics from March, 2009 through June, 2013. Ms. Witz has served on the board of Perkin Elmer, a publicly-held global scientific technology and life science research company, since October 2017; Horizon Pharma, a publicly-held pharmaceutical company, since August 2017; Fresenius Medical Care AG & Co. KGaA, a publicly-held world leader dialysis company, since May of 2016 and previously served on the board of Savencia SA, from April 2016 to April 2018. Ms. Witz received her MSc in Life Sciences & Engineering from the Institut National des Sciences Appliquées de Lyon, France and an MBA from INSEAD, Fontainebleau, France. She was also a Ph.D. student in Molecular Biology at the Centre National de la Recherche Scientifique, Strasbourg, France. Our Nominating and Corporate Governance Committee believes that Ms. Witz is qualified to serve on our Board of Directors due to the many years she has spent in the biopharmaceutical industry, which has provided her with a deep understanding of our industry and our activities.

**THE BOARD OF DIRECTORS RECOMMENDS
A VOTE FOR EACH NAMED NOMINEE**

INDEPENDENCE OF THE BOARD OF DIRECTORS

As required under the Nasdaq Stock Market (“Nasdaq”) listing standards, a majority of the members of a listed company’s Board of Directors must qualify as “independent,” as affirmatively determined by the Board of Directors. The Board consults with the Company’s counsel to ensure that the Board’s determinations are consistent with relevant securities and other laws and regulations regarding the definition of “independent,” including those set forth in pertinent listing standards of Nasdaq, as in effect from time to time.

Consistent with these considerations, after review of all relevant identified transactions or relationships between each director, or any of his family members, and the Company, its senior management and its independent auditors, the Board has affirmatively determined that the following six directors are independent directors within the meaning of the applicable Nasdaq listing standards: Dr. Baltimore, Ms. Collier, Dr. Papadopoulos, Dr. Rastetter, Dr. Rosen and Ms. Witz. In making this determination, the Board found that none of these directors or nominees for director had a material or other disqualifying relationship with the Company.

BOARD LEADERSHIP STRUCTURE

Our Board of Directors is currently chaired by Stelios Papadopoulos, Ph.D. As a general policy, our Board of Directors believes that separation of the positions of Chairman and Chief Executive Officer reinforces the independence of the Board of Directors from management, creates an environment that encourages objective oversight of management’s performance and enhances the effectiveness of the Board of Directors as a whole. As such, Mr. Hagan serves as our President and Chief Executive Officer while Dr. Papadopoulos serves as our Chairman of the Board of Directors but is not an officer. We expect and intend the positions of Chairman of the Board of Directors and Chief Executive Officer to continue to be held by separate individuals in the future.

ROLE OF THE BOARD IN RISK OVERSIGHT

One of the key functions of our Board of Directors is informed oversight of our risk management process. The Board of Directors does not have a standing risk management committee, but rather administers this

oversight function directly through the Board of Directors as a whole, as well as through various standing committees of our Board of Directors that address risks inherent in their respective areas of oversight. In particular, our Board of Directors is responsible for monitoring and assessing strategic risk exposure, and our Audit Committee has the responsibility to consider and discuss our major financial risk exposures and the steps our management has taken to monitor and control these exposures, including guidelines and policies to govern the process by which risk assessment and management is undertaken. The Audit Committee also monitors compliance with legal and regulatory requirements. Our Nominating and Corporate Governance Committee monitors the effectiveness of our corporate governance practices, including whether they are successful in preventing illegal or improper liability-creating conduct. Our Compensation Committee assesses and monitors whether any of our compensation policies and programs has the potential to encourage excessive risk-taking.

MEETINGS OF THE BOARD OF DIRECTORS

The Board of Directors met nine times during the last fiscal year and four times in executive session. All directors who served in 2017 attended at least 75% of the aggregate number of meetings of the Board and of the committees on which they served, held during the portion of the last fiscal year for which they were directors or committee members, respectively.

INFORMATION REGARDING COMMITTEES OF THE BOARD OF DIRECTORS

The Board maintains an Audit Committee, a Compensation Committee and a Nominating and Corporate Governance Committee. The following table provides membership and meeting information for the year ended December 31, 2017 for each of the Board committees:

<u>Name</u>	<u>Audit</u>	<u>Compensation</u>	<u>Nominating and Corporate Governance</u>
Dr. David Baltimore		X	X*
Mr. Mark G. Foletta ⁽¹⁾	X*		X
Dr. Stelios Papadopoulos ⁽²⁾	X	X	
Dr. William H. Rastetter	X	X*	
Dr. Hugh Rosen		X	X
Ms. Pascale Witz ⁽³⁾	X		X
Total meetings in 2017	4	8	2

* Committee Chairperson

- (1) In connection with Mr. Foletta's retirement from the Board at the annual meeting, Mr. Foletta will resign from all committees of the Board on which he serves. Concurrently with her appointment to the Board in April 2018, Ms. Collier was appointed as a member of the Audit Committee and the Nominating and Corporate Governance Committee.
- (2) Dr. Papadopoulos joined the Compensation Committee in June 2017.
- (3) Ms. Witz joined the Audit Committee and the Nominating and Corporate Governance Committee in June 2017.

Below is a description of each committee of the Board of Directors. Each of the committees has authority to engage legal counsel or other experts or consultants, as it deems appropriate to carry out its responsibilities. Our Board of Directors has determined that each member of each committee meets the applicable Nasdaq rules and regulations regarding "independence" and that each member is free of any relationship that would impair his or her individual exercise of independent judgment with regard to the Company.

Audit Committee

The Audit Committee of our Board of Directors was established by our Board of Directors in accordance with Section 3(a)(58)(A) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), to oversee

the Company's corporate accounting and financial reporting processes and audits of its financial statements. For this purpose, our Audit Committee performs several functions. Our Audit Committee evaluates the performance of and assesses the qualifications of the independent auditors; determines and approves the engagement of the independent auditors; determines whether to retain or terminate the existing independent auditors or to appoint and engage new independent auditors; reviews and approves the retention of the independent auditors to perform any proposed permissible non-audit services; monitors the rotation of partners of the independent auditors on the Company's audit engagement team as required by law; reviews and approves or rejects transactions between the Company and any related persons; confers with management and the independent auditors regarding the effectiveness of internal controls over financial reporting; establishes procedures, as required under applicable law, for the receipt, retention and treatment of complaints received by the Company regarding accounting, internal accounting controls or auditing matters and the confidential and anonymous submission by employees of concerns regarding questionable accounting or auditing matters; and meets to review the Company's annual audited financial statements and quarterly financial statements with management and the independent auditor, including a review of the Company's disclosures under "Management's Discussion and Analysis of Financial Condition and Results of Operations."

Our Audit Committee is currently composed of five directors: Ms. Collier, Mr. Foletta, Dr. Papadopoulos, Dr. Rastetter and Ms. Witz. Mr. Foletta will resign from the Audit Committee concurrently with his retirement from the Board at the annual meeting. The Audit Committee met four times during the last fiscal year. Our Board of Directors has adopted a written charter of the Audit Committee that is available to stockholders on the Company's website at www.regulusrx.com. Our Board of Directors reviews the Nasdaq listing standards definition of independence for Audit Committee members on an annual basis and has determined that all members of our Audit Committee are independent (as independence is currently defined in Rule 5605(c)(2)(A) of the Nasdaq listing standards). Our Board of Directors has determined that each member of our Audit Committee meets the requirements for independence under the Nasdaq listing standards.

Our Board of Directors has determined that each of Ms. Collier and Mr. Foletta qualify as an "audit committee financial expert," as defined in applicable SEC rules. In addition to the Audit Committee, Mr. Foletta also serves on the audit committee of AMN Healthcare Services, DexCom, Inc. and is currently the Executive Vice President and Chief Financial Officer of Tocagen, Inc. Our Board of Directors has made a qualitative assessment of Ms. Collier's level of knowledge and experience based on a number of factors, including her formal education, her experience in the investment banking industry and as the treasurer of a major publicly-traded energy services holding company.

Report of the Audit Committee of the Board of Directors*

The Audit Committee has reviewed and discussed the audited financial statements for the fiscal year ended December 31, 2017 with management of the Company. The Audit Committee has discussed with the independent registered public accounting firm the matters required to be discussed by the applicable requirements of the Public Company Accounting Oversight Board ("PCAOB") and the SEC. The Audit Committee has also received the written disclosures and the letter from the independent registered public accounting firm required by applicable requirements of the PCAOB regarding the independent accountants' communications with the Audit Committee concerning independence, and has discussed with the independent registered public accounting firm the accounting firm's independence. Based on the foregoing, the Audit Committee has 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 fiscal year ended December 31, 2017.

Mr. Mark G. Foletta (Chair)
Dr. Stelios Papadopoulos
Dr. William H. Rastetter
Ms. Pascale Witz

* This material is not “soliciting material,” is not deemed “filed” with the SEC and is not to be incorporated by reference in any filing of the Company under the Exchange Act or the Securities Act of 1933, as amended, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.

Compensation Committee

The Compensation Committee is currently composed of four directors: Dr. Baltimore, Dr. Papadopoulos, Dr. Rastetter and Dr. Rosen. The Board of Directors reviews the Nasdaq listing standards definition of independence for Compensation Committee members on an annual basis and has determined that all members of the Company’s Compensation Committee are independent (as independence is currently defined in Rule 5605(d)(2)(A) of the Nasdaq listing standards). The Compensation Committee met eight times during the last fiscal year. The Compensation Committee has adopted a written charter that is available to stockholders on the Company’s website at www.regulusrx.com.

The Compensation Committee acts on behalf of the Board to review, adopt and/or recommend for adoption and oversee the Company’s compensation strategy, policies, plans and programs. The functions of the Compensation Committee include, among other things:

- reviewing, modifying and approving (or if it deems appropriate, making recommendations to the full Board of Directors regarding) our overall compensation strategy and policies;
- reviewing and recommending to our Board of Directors the compensation and other terms of employment of our executive officers;
- reviewing and recommending to our Board of Directors the performance goals and objectives relevant to the compensation of our executive officers and assessing their performance against these goals and objectives;
- reviewing and approving (or if it deems it appropriate, making recommendations to the full Board of Directors regarding) the equity incentive plans, compensation plans and similar programs advisable for us, as well as modifying, amending or terminating existing plans and programs;
- evaluating risks associated with our compensation policies and practices and assessing whether risks arising from our compensation policies and practices for our employees are reasonably likely to have a material adverse effect on us;
- reviewing and approving (or if it deems it appropriate, making recommendations to the full Board of Directors regarding) the type and amount of compensation to be paid or awarded to our non-employee board members;
- establishing policies for allocating between long-term and currently paid out compensation, between cash and non-cash compensation and the factors used in deciding between the various forms of compensation;
- establishing policies with respect to votes by our stockholders to approve executive compensation as required by Section 14A of the Exchange Act and determining our recommendations regarding the frequency of advisory votes on executive compensation;
- reviewing and assessing the independence of compensation consultants, legal counsel and other advisors as required by Section 10C of the Exchange Act;
- establishing elements of corporate performance for purposes of increasing or decreasing compensation;
- administering our equity incentive plans;
- establishing policies with respect to equity compensation arrangements;

-
- reviewing regional and industry-wide compensation practices and trends to assess the competitiveness of our executive compensation programs and evaluating the effectiveness of our compensation policy and strategy in achieving expected benefits to us;
 - reviewing the adequacy of its charter on a periodic basis;
 - reviewing with management and approving our disclosures under the caption “Compensation Discussion and Analysis” in our periodic reports or proxy statements to be filed with the SEC; and
 - preparing the compensation committee report required by SEC rules.

Compensation Committee Processes and Procedures

Typically, the Compensation Committee meets at least twice annually and with greater frequency if necessary. The agenda for each meeting is usually developed by the Chair of the Compensation Committee, in consultation with the Chief Executive Officer. The Compensation Committee meets regularly in executive session. However, from time to time, various members of management and other employees as well as outside advisors or consultants may be invited by the Compensation Committee to make presentations, to provide financial or other background information or advice or to otherwise participate in Compensation Committee meetings. The Chief Executive Officer may not participate in, or be present during, any deliberations or determinations of the Compensation Committee regarding his compensation. The charter of the Compensation Committee grants the Compensation Committee full access to all books, records, facilities and personnel of the Company, as well as authority to obtain, at the expense of the Company, advice and assistance from internal and external legal, accounting or other advisors and consultants and other external resources that the Compensation Committee considers necessary or appropriate in the performance of its duties. In particular, the Compensation Committee has the sole authority to retain compensation consultants to assist in its evaluation of executive and director compensation, including the authority to approve the consultant’s reasonable fees and other retention terms.

During the past fiscal year, the Compensation Committee engaged Aon/Radford as a compensation consultant. The Committee engaged Aon/Radford to provide a competitive assessment of the Company’s executive compensation program compared to executive compensation paid to executives at selected publicly traded peer companies. Following a gap analysis of the peer companies, Aon/Radford made certain recommendations to the Compensation Committee to make modest increases in the level of equity grants to the Company’s executive team and to increase annual cash compensation for certain Company executives and Board Committee members who were paid below the median compared to the peer companies. The Compensation Committee analyzed whether the work of Aon/Radford as a compensation consultant raised any conflict of interest, taking into consideration the following factors: (i) the provision of other services to the Company by the compensation consultant; (ii) the amount of fees from the Company paid to the compensation consultant as a percentage of the firm’s total revenue; (iii) the policies and procedures of the compensation consultant that are designed to prevent conflicts of interest; (iv) any business or personal relationship of the compensation consultant or the individual compensation advisors employed by this firm with an executive officer of the Company; (v) any business or personal relationship of the individual compensation advisors with any member of the Compensation Committee; and (vi) any stock of the Company owned by the compensation consultant or the individual compensation advisors employed by this firm. The Compensation Committee concluded, based on its analysis of the above factors, that the work of Aon/Radford and the individual compensation advisors employed by this firm as a compensation consultant to the Company has not created any conflict of interest.

Under its charter, the Compensation Committee may form, and delegate authority to, subcommittees as appropriate. In 2012, the Compensation Committee formed a Non-Management Stock Option Committee, currently composed of Mr. Hagan, to which it delegated authority to grant, without any further action required by the Compensation Committee, stock options to employees who are not officers of the Company. The purpose of this delegation of authority is to enhance the flexibility of option administration within the Company and to facilitate the timely grant of options to non-management employees, particularly new employees, within

specified limits approved by the Compensation Committee. In particular, the subcommittee may grant options only within pre-approved guidelines and not to any employee who will have a vice president title or higher. Typically, as part of its oversight function, the Committee will review on a regular basis the list of grants made by the subcommittee. During fiscal year 2017, the subcommittee exercised its authority to grant options to purchase an aggregate of 1,549,391 shares of the Company's common stock to non-officer employees.

Historically, the Compensation Committee has made most of the significant adjustments to annual compensation, determined bonus and equity awards and established new performance objectives at one or more meetings held during the last quarter of the year. However, the Compensation Committee also considers matters related to individual compensation, such as compensation for new executive hires, as well as high-level strategic issues, such as the efficacy of the Company's compensation strategy, potential modifications to that strategy and new trends, plans or approaches to compensation, at various meetings throughout the year. Generally, the Compensation Committee's process comprises two related elements: the determination of compensation levels and the establishment of performance objectives for the current year. For executives other than the Chief Executive Officer, the Compensation Committee solicits and considers evaluations and recommendations submitted to the Committee by the Chief Executive Officer. In the case of the Chief Executive Officer, the evaluation of his performance is conducted by the Compensation Committee, which determines any adjustments to his compensation as well as awards to be granted. For all executives and directors as part of its deliberations, the Compensation Committee may review and consider, as appropriate, materials such as financial reports and projections, operational data, tax and accounting information, tally sheets that set forth the total compensation that may become payable to executives in various hypothetical scenarios, executive and director stock ownership information, company stock performance data, analyses of historical executive compensation levels and current Company-wide compensation levels and recommendations of the Company's Vice President, Legal Affairs, including analyses of executive and director compensation paid at other companies identified by the Company's Vice President, Legal Affairs.

Nominating and Corporate Governance Committee

The Nominating and Corporate Governance Committee of the Board of Directors is responsible for identifying, reviewing and evaluating candidates to serve as directors of the Company (consistent with criteria approved by the Board), reviewing and evaluating incumbent directors, recommending to the Board for selection candidates for election to the Board of Directors, making recommendations to the Board regarding the membership of the committees of the Board, assessing the performance of the Board, and monitoring the Company's adherence to its Code of Business Conduct and Ethics.

The Nominating and Corporate Governance Committee is composed of five directors: Dr. Baltimore, Ms. Collier, Mr. Foletta, Dr. Rosen and Ms. Witz. All members of the Nominating and Corporate Governance Committee are independent (as independence is currently defined in Rule 5605(a)(2) of the Nasdaq listing standards). The Nominating and Corporate Governance Committee met twice during 2017. The Nominating and Corporate Governance Committee has adopted a written charter that is available to stockholders on the Company's website and www.regulusrx.com.

The Nominating and Corporate Governance Committee believes that candidates for director, both individually and collectively, can and do provide the integrity, experience, judgment, commitment (including having sufficient time to devote to the Company and level of participation), skills, diversity and expertise appropriate for the Company. In assessing the directors, both individually and collectively, the Nominating and Corporate Governance Committee may consider the current needs of the Board and the Company to maintain a balance of knowledge, experience and capability in various areas. However, the Nominating and Corporate Governance Committee retains the right to modify these qualifications from time to time. Candidates for director nominees are reviewed in the context of the current composition of the Board, the operating requirements of the Company and the long-term interests of stockholders. In conducting this assessment, the Nominating and Corporate Governance Committee typically considers diversity, age, skills and such other factors as it deems

appropriate given the current needs of the Board and the Company, to maintain a balance of knowledge, experience and capability. In the case of incumbent directors whose terms of office are set to expire, the Nominating and Corporate Governance Committee reviews these directors' overall service to the Company during their terms, including the number of meetings attended, level of participation, quality of performance and any other relationships and transactions that might impair the directors' independence. In the case of new director candidates, the Nominating and Corporate Governance Committee also determines whether the nominee is independent for Nasdaq purposes, which determination is based upon applicable Nasdaq listing standards, applicable SEC rules and regulations and the advice of counsel, if necessary. The Nominating and Corporate Governance Committee then uses its network of contacts to compile a list of potential candidates, but may also engage, if it deems appropriate, a professional search firm. The Nominating and Corporate Governance Committee conducts any appropriate and necessary inquiries into the backgrounds and qualifications of possible candidates after considering the function and needs of the Board. The Nominating and Corporate Governance Committee meets to discuss and consider the candidates' qualifications and then selects a nominee for recommendation to the Board by majority vote.

The Nominating and Corporate Governance Committee will consider director candidates recommended by stockholders. The Nominating and Corporate Governance Committee does not intend to alter the manner in which it evaluates candidates, including the minimum criteria set forth above, based on whether or not the candidate was recommended by a stockholder. Stockholders who wish to recommend individuals for consideration by the Nominating and Corporate Governance Committee to become nominees for election to the Board may do so by delivering a written recommendation to the Nominating and Corporate Governance Committee at the Company's principal executive offices, Attn: Secretary, no later than the 90th day and no earlier than the 120th day prior to the one year anniversary of the preceding year's annual meeting. Submissions must include (1) the name and address of the Company stockholder on whose behalf the submission is made; (2) the number of Company shares that are owned beneficially by such stockholder as of the date of the submission; (3) the full name of the proposed candidate; (4) a description of the proposed candidate's business experience for at least the previous five years; (5) the complete biographical information for the proposed candidate; (6) a description of the proposed candidate's qualifications as a director; and (7) any other information required by the Company Bylaws. The Company may require any proposed nominee to furnish such other information as it may reasonably require to determine the eligibility of such proposed nominee to serve as an independent director of the Company or that could be material to a reasonable stockholder's understanding of the independence, or lack thereof, of such proposed nominee.

Stockholder Communications with the Board of Directors

The Company's Board has adopted a formal process by which stockholders may communicate with the Board or any of its directors. Stockholders who wish to communicate with the Board may do so by sending written communications addressed to the Secretary of Regulus Therapeutics Inc. at the Company's principal executive offices. Each communication must set forth: the name and address of the Company stockholder on whose behalf the communication is sent; and the number of Company shares that are owned beneficially by such stockholder as of the date of the communication. Each communication will be reviewed by the Company's Secretary to determine whether it is appropriate for presentation to the Board or relevant directors.

Communications determined by the Company's Secretary to be appropriate for presentation to the Board or any relevant directors are submitted to the Board or relevant directors on a periodic basis.

Code of Ethics

The Company has adopted a Code of Business Conduct and Ethics that applies to all directors, officers (including our principal executive officer, principal financial officer and principal accounting officer) and employees. The Code of Business Conduct and Ethics is available on the Company's website at www.regulusrx.com under the Corporate Governance section of our Investor Relations page. If the Company

makes any substantive amendments to the Code of Business Conduct and Ethics that applies to our principal executive officer, principal financial officer, principal accounting officer, controller or persons performing similar functions, or grants any waiver from a provision of the Code of Business Conduct and Ethics to any of these specified individuals that is required to be disclosed pursuant to SEC rules and regulations, the Company will promptly disclose the nature of the amendment or waiver on its website.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act requires the Company's directors and executive officers, and persons who own more than ten percent of a registered class of the Company's equity securities, to file with the SEC initial reports of ownership and reports of changes in ownership of common stock and other equity securities of the Company. Officers, directors and greater than ten percent stockholders are required by SEC regulation to furnish the Company with copies of all Section 16(a) forms they file.

To the Company's knowledge, based solely on a review of the copies of such reports furnished to the Company and written representations that no other reports were required, during the fiscal year ended December 31, 2017, all Section 16(a) filing requirements applicable to its officers, directors and greater than ten percent beneficial owners were complied with; except that one report, covering an aggregate of one transaction each, was filed late by Dr. Grint, Dr. Wright and Mr. Hagan.

PROPOSAL 2

ADVISORY VOTE ON EXECUTIVE COMPENSATION

Under the Dodd-Frank Wall Street Reform and Consumer Protection Act (the “Dodd-Frank Act”) and Section 14A of the Exchange Act, the Company’s stockholders are entitled to vote to approve, on an advisory basis, the compensation of the Company’s named executive officers as disclosed in this proxy statement in accordance with SEC rules.

This vote is not intended to address any specific item of compensation, but rather the overall compensation of the Company’s named executive officers and the philosophy, policies and practices described in this proxy statement. The compensation of the Company’s named executive officers subject to the vote is disclosed in the Compensation Discussion and Analysis, the compensation tables, and the related narrative disclosure contained in this proxy statement. As discussed in those disclosures, the Company believes that its compensation policies and decisions are focused on pay-for-performance principles and strongly aligned with our stockholders’ interests.

Accordingly, the Board is asking the shareholders to indicate their support for the compensation of the Company’s named executive officers as described in this proxy statement by casting a non-binding advisory vote “FOR” the following resolution:

“RESOLVED, that the compensation paid to the Company’s named executive officers, as disclosed pursuant to Item 402 of Regulation S-K, including the Compensation Discussion and Analysis, compensation tables and narrative discussion is hereby APPROVED.”

Because the vote is advisory, it is not binding on the Board of Directors or the Company. Nevertheless, the views expressed by the stockholders, whether through this vote or otherwise, are important to management and the Board and, accordingly, the Board and the Compensation Committee intend to consider the results of this vote in making determinations in the future regarding executive compensation arrangements.

Vote Required

Approval of this proposal requires the vote of the holders of a majority of the shares present in person or represented by proxy and entitled to vote on this matter at the annual meeting. Abstentions and broker non-votes will be counted toward a quorum for Proposal 3, and abstentions will have the same effect as “Against” votes.

THE BOARD OF DIRECTORS RECOMMENDS

A VOTE FOR PROPOSAL 2

PROPOSAL 3

ADVISORY VOTE ON THE FREQUENCY OF SOLICITATION OF ADVISORY STOCKHOLDER APPROVAL OF EXECUTIVE COMPENSATION

The Dodd-Frank Wall Street Reform and Consumer Protection Act, and Section 14A of the Exchange Act, enable the Company's stockholders, at least once every six years, to indicate their preference regarding how frequently the Company should solicit a non-binding advisory vote on the compensation of the Company's named executive officers as disclosed in the Company's proxy statement. Accordingly, the Company is asking its stockholders to indicate whether they would prefer an advisory vote every year, every other year or every three years. Alternatively, stockholders may abstain from casting a vote. For the reasons described below, the Board recommends that the stockholders select a frequency of one year.

After careful consideration, our Board of Directors has determined that holding an advisory vote on executive compensation every year is the most appropriate policy for us at this time, and recommends that stockholders vote for future advisory votes on executive compensation to occur every year. While our executive compensation program is designed to promote a long-term connection between pay and performance, our Board of Directors recognizes that executive compensation disclosures are made annually. Our Board of Directors considered that an annual advisory vote on executive compensation will allow our stockholders to provide us with their direct input on our compensation philosophy, policies and practices as disclosed in the proxy statement every year. However, stockholders should note that because the advisory vote on executive compensation occurs well into the compensation year, and because the different elements of our executive compensation program are designed to operate as part of an integrated program, it may not be appropriate or feasible to modify our executive compensation program in consideration of any one year's advisory vote on executive compensation by the time of the following year's annual meeting of stockholders.

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

Accordingly, our Board of Directors is asking stockholders to indicate their preferred voting frequency by voting for every year, every two years or every three years.

While our Board of Directors believes that its recommendation is appropriate at this time, the stockholders are not voting to approve or disapprove that recommendation, but are instead asked to indicate their preferences, on an advisory basis, as to whether the non-binding advisory vote on the approval of our executive officer compensation practices should be held every year, every two years or every three years. We will consider the frequency approved by the highest number of votes cast by stockholders entitled to vote on this proposal to be the frequency preferred by our stockholders.

Our Board of Directors and the Compensation Committee value the opinions of our stockholders in this matter, and, to the extent there is any significant vote in favor of one frequency over the other options, our Board will consider the stockholders' concerns and evaluate any appropriate next steps. However, because this vote is advisory and, therefore, not binding on us or our Board of Directors, our Board may decide that it is in the best interests of our stockholders that we hold an advisory vote on executive compensation more or less frequently than the option preferred by our stockholders. The vote will not be construed to create or imply any change or addition to our fiduciary duties or those of our Board.

THE BOARD OF DIRECTORS RECOMMENDS

A VOTE IN FAVOR OF ONE YEAR FOR PROPOSAL 3

EXECUTION COMPENSATION

Compensation Discussion and Analysis

We became a public company in October, 2012, and we filed our proxy statements in 2013 through 2017 under the scaled-down reporting rules applicable to emerging growth companies. As of the close of calendar year 2017, we ceased to be an emerging growth company and, therefore, this year's Proxy Statement includes additional detail regarding executive compensation that was previously not required, including: this Compensation Discussion and Analysis, additional compensation tables for "Grants of Plan-Based Awards," "Option Exercises and Stock Vested," and "Potential Payments upon Termination or Change in Control," and advisory vote on the compensation of our named executive officers, which is included as Proposal 2 in this Proxy Statement; and an advisory vote on the preferred frequency of advisory votes on the compensation of our named executive officers, which is included as Proposal 3 in this Proxy Statement.

This Compensation Discussion and Analysis describes the compensation decisions for the following individuals, who are our "Named Executive Officers" or "NEOs" for the year ended December 31, 2017:

- Joseph P. Hagan, our President and Chief Executive Officer (promoted to President and Chief Executive Officer in May 2017);
- Timothy Wright, M.D., our Chief Research & Development Officer;
- Mark Deeg, M.D., Ph.D., our Chief Medical Officer (commenced employment in April 2017, promoted to Chief Medical Officer in June 2017);
- Daniel R. Chevallard, our Chief Financial Officer (promoted to Chief Financial Officer in May 2017); and
- Paul C. Grint, M.D., our former President and Chief Executive Officer (resigned in May 2017).

All references in this Compensation Discussion and Analysis to the "Chief Executive Officer" and "CEO" refer to Dr. Grint, prior to May 4, 2017, the date Dr. Grint ceased service as our Chief Executive Officer, and Mr. Hagan, on and after May 4, 2017, the date Mr. Hagan commenced service with us as our Chief Executive Officer.

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3. <i>2017 Compensation Decisions</i> . In this section, we describe the specific 2017 compensation decisions for our NEOs.	28
4. <i>Other Executive Compensation Matters</i> . In this section, we provide an overview of employment agreements, change in control and severance benefits, and employee benefits. We also review the accounting and tax considerations related to compensation and our compensation risk assessment.	33

Executive Summary

Business Overview

We are a clinical-stage biopharmaceutical company focused on discovering and developing first-in-class drugs targeting *microRNAs* to treat diseases with significant unmet medical need. Our two lead product candidates, RG-012 and RGLS4326, are currently in clinical development. RG-012 is an anti-miR targeting miR-21 for the treatment of Alport syndrome, a with no approved therapy available. RGLS4326 is an anti-miR targeting miR-17 for the treatment of autosomal dominant polycystic kidney disease, or ADPKD. In addition to these programs, we continue to develop a pipeline of preclinical drug candidates.

2017 was a transitional year for our Company. We made important changes to our portfolio and implemented a corporate restructuring to streamline our operations, reduce our operating expenses, extend our cash runway and focus our resources on our most promising programs. We also implemented a reduction in our total workforce by approximately 30%. In connection with these changes, we experienced significant transition within our leadership team: in May 2017, Dr. Grint resigned as our Chief Executive Officer, and Mr. Hagan, our then Chief Operating Officer, was promoted to the role of Chief Executive Officer. Mr. Chevillard, our then Vice President, Finance and Accounting, was promoted to the role of Chief Financial Officer in May 2017 and we promoted Dr. Deeg to the role of Chief Medical Officer in June 2017 after joining our Company in April 2017. It was critical to our Board of Directors and Compensation Committee of our Board of Directors (the “Compensation Committee”) that our compensation arrangements with our executive officers provided the appropriate support and incentives to retain, motivate and reward our executive officers through this time of transition. We continue to carefully evaluate our compensation arrangements, as necessary, to move our company forward and ensure that our pay program aligns our executives’ compensation with our stockholders’ interests and our company performance over the long-term.

2017 Corporate Performance Highlights

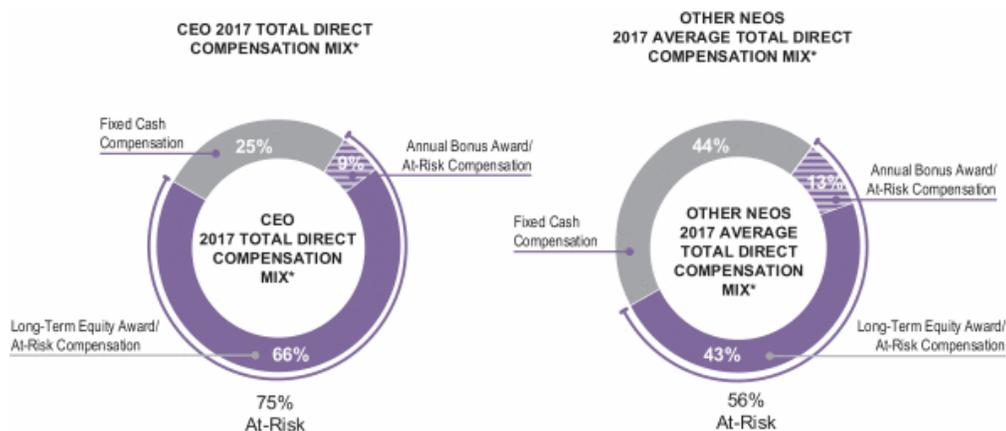
2017 was a year of significant achievement for the Company as we:

- commenced our Phase 2 study of RG-012 in patients with Alport syndrome;
- commenced the renal biopsy study of RG-012 to determine target engagement in Alport syndrome patients treated with RG-012;
- filed an IND to commence the clinical study of RGLS4326 for the treatment of ADPKD;
- commenced a single ascending dose Phase 1 study of RGLS4326 in healthy volunteers to test the safety, tolerability, pharmacokinetics and pharmacodynamics of RGLS4326
- raised \$46 million to support the clinical and preclinical development of our drug candidates; and
- maintained our strong capital structure by meeting our expected expense burn and remaining on budget.

Pay for Performance/At Risk Pay

Our executive compensation program is designed to reward achievement of the specific strategic goals that we believe will advance our business strategy and create long-term value for our stockholders. Consistent with our goal of attracting, motivating and retaining a high-caliber executive team, our executive compensation program is designed to pay for performance. We utilize compensation elements that meaningfully align our NEOs’ interests with those of our stockholders to create long-term value. As such, a significant portion of our CEO’s and other executive officers’ compensation is “at risk”, performance-based compensation, in the form of long-term equity awards, performance-vesting equity awards and annual cash incentives that are only earned if we achieve measurable corporate metrics. The charts below show the 2017 total reported pay mix of our current CEO, Mr. Hagan, and our other NEOs (excluding Dr. Grint, who terminated during 2017) and the portion of each

individual's aggregate reported pay that is tied directly to performance, consisting of annual performance bonus earned and equity incentives awarded (based on such equity incentives' grant date fair value as reported in the "Summary Compensation Table").



* Reflects 2017 fixed cash compensation, consisting of annual base salaries (and, with respect to Mr. Deeg, signing bonus) performance bonus earned and grant date fair values of equity awards based on such equity incentives' grant date fair value as reported in the Summary Compensation Table, for each of our NEOs other than Dr. Grint who terminated service in 2017.

Responsible Executive Compensation Practices

The following table summarizes what we do and what we don't do in our executive compensation practices to highlight both the responsible practices we have implemented and the practices we have avoided to best serve our stockholders' long-term interests.

What We Do

- ✓ Heavily weight our NEO compensation toward "at risk," performance-based compensation
- ✓ Use multi-year vesting for all executive officer equity awards
- ✓ Grant equity awards that vest based on objective performance goals
- ✓ Structure our executive compensation program to minimize inappropriate risk-taking
- ✓ Select peer companies that we compete with for executive talent, have a similar business and are of similar size as us, and review their pay practices
- ✓ Solicit advice from the Compensation Committee's independent compensation consultant
- ✓ Have three or more independent non-employee directors serve on the Compensation Committee

What We Don't Do

- × Provide any of our executive officers with any excise tax or other tax gross-ups
- × Pay dividends or dividend equivalents on unearned shares
- × Permit hedging or other forms of speculative transactions by executive officers, members of management and directors
- × Provide single-trigger change in control cash payments
- × Provide excessive cash severance benefits to our executive officers
- × Provide any defined benefit pension plans or supplemental employee retirement plans to our executive officers

Executive Compensation Program

Compensation Philosophy and Overall Compensation Determination Process

We believe that in order to create value for our stockholders, it is critical to attract, motivate and retain key executive talent by providing competitive compensation packages. Accordingly, we design our executive compensation programs to:

- attract, motivate and retain executives with the skills and expertise to execute our business plans;
- reward those executives fairly over time for actions consistent with creating long-term stockholder value;
- align the interests of our executive officers with those of our stockholders;
- provide compensation packages that are competitive, reasonable and fair within the highly competitive life sciences market for talented individuals.

Our compensation philosophy for executive officers provides that cash compensation should be structured such that a significant percentage of each executive officer's total cash compensation, consisting of base salary and target cash incentives, is at risk and dependent upon the Company's performance. Non-cash long-term equity compensation for executive officers is generally a combination of awards subject to performance-based and time-based vesting, and is designed to motivate executive officers to increase long-term stockholder value as well as reward and retain key employees. The Compensation Committee believes that this approach provides an appropriate blend of short-term and long-term incentives to maximize stockholder value.

The implementation of the compensation philosophy is carried out under the supervision of the Compensation Committee. The Compensation Committee uses the services of an independent compensation consultant who is retained by, and reports directly to, the Compensation Committee.

We do not have any formal policies for allocating compensation among salary, performance-based bonus awards and equity grants, short-term and long-term compensation or among cash and non-cash compensation. Instead, the Compensation Committee uses its judgment to establish a total compensation program for each Named Executive Officer that is a mix of current, short-term and long-term incentive compensation, and cash and non-cash compensation, that it believes is appropriate to achieve the goals of our executive compensation program and our corporate objectives. The Compensation Committee generally aims to deliver a significant portion of our Named Executive Officers' target total direct compensation opportunity as "at-risk" compensation in the form of performance-based bonus opportunities and long-term equity awards tied to stockholder returns and measurable corporate performance, in order to align the executive officers' incentives with the interests of our stockholders and our corporate goals.

Role of the Compensation Committee and Executive Officers in Determining Compensation

The compensation of our Named Executive Officers is determined and approved by our Compensation Committee, who recommends its decisions to our Board of Directors. Our Board of Directors, without members of management or any of our Named Executive Officers present, also approves all Named Executive Officer compensation decisions. The Compensation Committee's roles and responsibilities are described above in the section entitled "Information Regarding Committees of the Board of Directors."

At the end of each year, the Compensation Committee, without the presence of our Chief Executive Officer, deliberates and makes decisions regarding the base salary, target cash incentives and long-term equity award components of compensation to be awarded to our Chief Executive Officer for the next calendar year, as well as performance-based compensation payouts for the prior fiscal year. In setting compensation for our other NEOs, the Compensation Committee solicits the input of our Chief Executive Officer, who recommend to the

Compensation Committee the base salary, target cash incentives and long-term equity award components of compensation to be awarded to our NEOs (other than the CEO) for the new fiscal year, as well as performance-based compensation payouts for the prior fiscal year. Members of our human resources and legal departments assist in gathering and presenting market data from Radford to assist the CEO and the Compensation Committee in its executive compensation recommendations and decisions, respectively. The Compensation Committee remains solely responsible for making the decisions on compensation for all of our executive officers, including the NEOs. Our NEOs are not present during discussions of their compensation packages nor do they participate in approving any portion of their own compensation packages.

The Chief Executive Officer annually reviews the performance of each NEO (other than himself) and discusses these performance reviews with the Compensation Committee and makes recommendations to the Compensation Committee for bonus, stock option awards and base pay in the following year. These recommendations reflect his consideration of the market data, the performance of each NEO, internal pay equity among individuals (including qualifications and contributions to meeting our corporate objectives), criticality and scope of job function and our Chief Executive Officer's extensive industry experience. The Compensation Committee then sets the compensation of our NEOs at levels that the Compensation Committee considers to be competitive and appropriate for each NEO, using the Compensation Committee's professional experience and judgment, considering a variety of factors described below in the section entitled "Factors Used in Determining Executive Compensation."

The Compensation Committee generally meets at least four times per year. In the fourth quarter of the year, the performance of each executive officer for the past year and peer group compensation data are reviewed by the Compensation Committee, and base salary adjustments, cash incentive payouts, following year targets and annual equity grants are discussed and approved. Also during the fourth quarter of the year, Company-wide performance goals for the following year are finalized by the Compensation Committee and the Board of Directors. At mid-year meetings, the Compensation Committee reviews the Company's compensation philosophy, policies and procedures. Meetings in the second and third quarters of the year generally focus on Company selection of the peer group criteria and selection of the peer group itself for the year-end executive officer performance reviews. The Compensation Committee may make additional compensation decisions and equity grants throughout the year as necessary to address departures, new hires, promotions or special retention concerns.

Role of Compensation Consultant

The Compensation Committee uses the services of an independent compensation consultant who is retained by, and reports directly to, the Compensation Committee to provide the Compensation Committee with an additional external perspective with respect to its evaluation of relevant market and industry practices. Since 2013, the Compensation Committee has used Radford, an AON Hewitt Company, as a third-party compensation consultant to assist the Compensation Committee in establishing overall compensation levels. Radford conducted analyses and provided advice on, among other things, the appropriate peer group, executive compensation for our executive officers and compensation trends in the life sciences industry.

In weighing its recommendations for executive compensation for the fiscal year 2017, the Compensation Committee directed Radford to advise the Compensation Committee on both best practices and peer practices when designing and modifying our compensation program for executive officers in order to achieve our objectives. As part of its duties, Radford provided the Compensation Committee with the following services with respect to 2017 compensation decisions:

- carried out a comprehensive review of our peer group for use in making 2017 executive compensation decisions;
- provided compensation data for the peer group and relevant executive pay survey data and an analysis of the compensation of the Company's executive officers as compared to this market data;

- provided a competitive assessment of, and comparison to, incentive design and executive pay program structure based on peer group data;
- provided recommendations regarding the annual cash incentive and long-term equity incentive program design for 2017;
- assisted the Compensation Committee with the design of 2017 pay programs consistent with the Company’s business strategy and pay philosophy;
- provided background information and data for 2017 adjustments to the Company’s executive compensation program consistent with good governance practices and the Company’s objectives; and
- prepared an analysis of the 2017 compensation program for the non-employee members of the Board of Directors.

The Compensation Committee annually assesses whether the work of Radford as a compensation consultant has raised any conflict of interest, taking into consideration the following factors: (i) the provision of other services to the Company by Radford; (ii) the amount of fees the Company paid to Radford as a percentage of the firm’s total revenue; (iii) Radford’s policies and procedures that are designed to prevent conflicts of interest; (iv) any business or personal relationship of Radford or the individual compensation advisors employed by the firm with an executive officer of the Company; (v) any business or personal relationship of the individual compensation advisors with any member of the Compensation Committee and (vi) any stock of the Company owned by Radford or the individual compensation advisors employed by the firm. The Compensation Committee has determined, based on its analysis of the above factors, that the work of Radford and the individual compensation advisors employed by Radford as compensation consultants to the Company has not created any conflict of interest.

Peer Group and Market Data

2017 Peer Group. When developing a proposed list of our peer group companies to be used in connection with making compensation decisions for 2017, Radford recommended biopharmaceutical companies that were pre-commercial and in early stages of development, had market values generally between \$100 million and \$600 million and with a preference for companies with headcounts under 200. At the time the peer group criteria was established in mid-2016, our headcount was 88 employees, our market value was approximately \$280 million and we had two Phase 1 and one Phase 2 clinical programs ongoing and had recently completed another Phase 1 clinical program. We were also in the planning stages for an additional Phase 2 program. Based on these criteria, Radford recommended, and the Compensation Committee approved, the following companies as our peer group for 2017:

2017 Peer Group Companies

AcelRx Pharmaceuticals	Arrowhead Pharmaceuticals	Fate Therapeutics	OncoMed Pharmaceuticals
Achaogen	BioTime	Ignyta	Revance Therapeutics
Aerie Pharmaceuticals	ChemoCentryx	Immune Design	Rigel Pharmaceuticals
Agenus	Cidara Therapeutics	Inovio Pharmaceuticals	Tobira Therapeutics
Ardelyx	Cytokinetics	Mirati Therapeutics	Vital Therapies

In late 2016, Radford completed an assessment of executive compensation based on the 2017 peer group to inform the Compensation Committee’s determinations of executive compensation for 2017. This market data was compiled from multiple sources, including: (i) the 2017 peer group companies’ publicly disclosed information, or public peer data and (ii) the data from public biotechnology and pharmaceutical companies in the Radford Global Life Sciences Survey for the 2017 peer group companies, or the survey peer data. The components of the market

data were based on the availability of sufficient comparative data for an executive officer's position. The survey peer data and the public peer data, collectively referred to in this Proxy Statement together as market data, were reviewed by the Compensation Committee, with the assistance of Radford, and used as one reference point, in addition to other factors, in setting our executive officers' compensation.

The Compensation Committee generally reviews total direct compensation, comprising both target cash compensation and equity compensation, against the market data described above primarily to ensure that our executive compensation program as a whole is positioned competitively to attract and retain the highest caliber executive officers and that the total direct compensation opportunity for the executive officer group is aligned with our corporate objectives and strategic needs. The Compensation Committee reviews market data reference points (generally at the 50th percentile of the market data) with respect to total direct compensation, total target cash compensation (including both base salary and the target annual cash incentive) and equity compensation (valued based on an approximation of grant date fair value). However the market data is only one of the many factors the Compensation Committee considers when determining pay and award levels, as described below under "Factors Used in Determining Executive Compensation."

2018 Peer Group. In late 2017, when developing a proposed list of our peer group companies to be used in connection with making compensation decisions for 2018, Radford selected biopharmaceutical companies that were in clinical development but pre-commercial (in Phases 1, 2 or 3 of development), had market values under \$500 million (5x our market value at the time) and had headcounts under 200. Based on these criteria and Radford's recommendation, our Compensation Committee removed AcetRx Pharmaceuticals, Achaogen, Aerie Pharmaceuticals, Arrowhead Pharmaceuticals, Cytokinetics, Inovio Pharmaceuticals, Revance Therapeutics, Rigel Pharmaceuticals and Tobira Therapeutics (which was removed due to its acquisition by Allergan) and added ArQule, Cascadian Therapeutics, Chimerix, ContraFect, Endocyte, Infinity Pharmaceuticals, Synthetic Biologics and Verastem to the remaining 2017 peers to form the final 2018 list of peer companies.

Factors Used in Determining Executive Compensation

The Compensation Committee does not use a formulaic approach to setting executive pay levels. Rather, the Compensation Committee uses its professional experience and judgment to make executive compensation considering a multitude of relevant factors that may vary from year to year. In making executive compensation decisions, the Compensation Committee generally takes into consideration the factors listed below.

- ✓ Company performance
- ✓ Individual NEO performance (including qualifications and contributions to meeting corporate objectives)
- ✓ Individual criticality and scope of job function, experience, length of time in his or her role
- ✓ Internal pay equities among executive team
- ✓ Market data from independent compensation consultant
- ✓ CEO recommendations (other than for himself)
- ✓ Retention risk
- ✓ Total targeted and historical compensation (including equity ownership levels and unvested and vested equity opportunities)
- ✓ General market trends

Components of Executive Compensation

Compensation for our NEOs currently consists of three key elements that are designed to reward performance in a simple and straightforward manner: base salaries, annual performance-based cash incentives and long-term equity awards, which generally consist of stock options, which vest based on continued service over time, and performance stock options, which vest upon achievement of key corporate metrics that we believe will create shareholder value. The purpose and key characteristics of each of these elements are summarized below.

Element	Purpose	Key Characteristics
Base Salary	Designed to compensate competitively at levels necessary to attract and retain qualified executives in the life sciences industry; generally based on the scope of each executive officer's responsibilities, as well as his or her qualifications, breadth of experience, performance record and depth of applicable functional expertise; and range of market data, enabling the Company to attract, motivate, reward and retain highly skilled executives; gives executives a degree of certainty in light of having a majority of their compensation at risk.	<p>Fixed compensation where year-to-year adjustments to each executive officer's base salary are based upon sustained superior performance, changes in the general level of base salaries of persons in comparable positions within our industry, and any average merit salary increase for such year established by the Compensation Committee for all employees, as well as other factors the Compensation Committee judges to be pertinent during an assessment period.</p> <p>In making base salary decisions, the Compensation Committee exercises its judgment to determine the appropriate weight to be given to each of these factors. Adjustments may also be made during the fiscal year for promotions, highly urgent retention reasons, superior performance in response to changed or challenging circumstances, and similar special circumstances.</p>
Annual Cash Incentives (Annual Performance Bonus)	Motivates executive officers to achieve our short-term strategic plan and milestones that are designed to drive long-term growth and performance while providing flexibility to respond to opportunities and changing market conditions.	<p>Annual cash award based on corporate performance compared to pre-established corporate goals with pre-established target payouts for each executive officer.</p> <p>The cash incentive program, including corporate goals and target payouts, are reviewed and approved by the Board and the Compensation Committee annually and may include individual performance targets for each executive officer, other than our CEO. The corporate goals are prepared in an interactive process between management and the Board of Directors and Compensation Committee based on the Company's business plan and budget for the year. The Compensation Committee establishes the target of each executive officer's cash incentive payment and reviews the appropriateness of the target annually.</p>

Element	Purpose	Key Characteristics
Long-Term Equity Incentives (Stock Options)	Motivates executive officers to achieve our business objectives by tying incentives to the appreciation of our common stock over the long term.	Stock options with an exercise price equal to the fair market value on the date of grant generally vesting monthly over four years for executive-level grants; the ultimate value realized, if any, depends on the appreciation of our common stock price from the date of grant. Stock options grants are made in connection with the hiring of an executive officer and annually, typically at year end and/or the beginning of the following year, when the other elements of compensation are determined. Adjustments may also be made during the fiscal year for promotions, highly urgent retention reasons, superior performance in response to changed or challenging circumstances, and similar special circumstances.
Long-Term Equity Incentives (PSOs)	Creates a strong link to the Company's long-term performance, creates an ownership culture and closely aligns the interests of our executive officers with those of our stockholders because the value the grants deliver are directly dependent on our performance goal attainment.	PSOs only vest upon achievement of objectively measurable performance goals that focus executives on achieving specific Company performance goals and increasing stockholder value.

In addition, executive officers are eligible to participate in the Company's employee benefit plans and benefits on the same terms as all other full-time employees, including medical, dental and life insurance benefits as well as disability insurance premiums and wellness benefits. The terms of the Company's 401(k) Savings Plan (the "401(k) Plan") provide for executive officer and broad-based employee participation on the same general terms. Under the 401(k) Plan, all Company employees are eligible to receive basic matching contributions from the Company that immediately vest. This other compensation provides benefits that promote employee health and welfare, which assists in attracting and retaining our executive officers; certain additional benefits reflect market standards and are reasonable and necessary to attract and/or retain each of our executive officers and allow the executive officers to realize the full benefit of the other elements of compensation we provide.

We also offer severance and change in control benefits, the terms of which are described below under the section entitled "Other Compensation Matters- Change in Control and Severance Benefits."

Compensation Committee Actions in Connection with Say-on-Pay Vote

Our Compensation Committee is committed to ensuring that our executive compensation program is effective and aligned with our stockholders' interests and concerns. Accordingly, a critical component of our Compensation Committee's process has been to continue to:

- review emerging compensation "best practices" in the U.S., with a focus toward companies of similar size; and
- solicit advice from our Compensation Committee's independent compensation consultant.

In 2018, we will be seeking our first advisory vote from our stockholders regarding our executive compensation program, or a say-on-pay vote, and an advisory vote on the frequency with which we will hold

say-on-pay votes. Each year thereafter, the Compensation Committee will consider the results of the prior advisory votes as it completes its annual review of each pay element and the compensation provided to our Named Executive Officers and other executives.

2017 Compensation Decisions

Annual Base Salary

In January 2017, the Compensation Committee reviewed the base salaries for our Named Executive Officers. The Compensation Committee considered each officer's then-current base salary level (if applicable), the market data from Radford, our 3% company-wide corporate merit increase target for base salaries, the scope of each executive's responsibilities for 2017, and internal pay equity. The Compensation Committee also considered the recommendations of our Chief Executive Officer for base salary increases for officers other than himself.

The Compensation Committee determined Mr. Hagan's 2017 base salary as Chief Executive Officer by reference to Dr. Grint's base salary in such role, and taking into consideration Mr. Hagan's prior experience. Likewise, the Compensation Committee set the base salaries for Dr. Deeg and Mr. Chevallard as a result of their promotions, to reflect their increased responsibilities and their experience. Dr. Wright received a very small increase to his 2016 base salary because he commenced employment in 2016 and accordingly the Compensation Committee determined a minimal merit increase was appropriate based on his tenure. The Compensation Committee increased Dr. Grint's 2017 base salary 6% to align it closer to the 50th percentile of the market data.

The Named Executive Officers' 2017 annual base salaries and increases from 2016 annual base salaries were as follows:

Name	2017 Base Salary (\$)		Increase from 2016 Base Salary (%)
Joseph P. Hagan	500,000	(1)	N/A (promotion)
Timothy Wright, M.D.	453,366	(2)	< 1%
Mark Deeg, M.D., Ph.D.	360,000	(3)	N/A (new hire/promotion)
Daniel R. Chevallard	300,000	(4)	N/A (promotion)
Paul C. Grint, M.D.	545,900	(5)	6%

- (1) Effective as of May 4, 2017 upon Mr. Hagan's promotion to Chief Executive Officer. Prior to his promotion, Mr. Hagan's base salary during 2017 was \$427,500.
- (2) Effective as of January 1, 2017.
- (3) Effective as of June 22, 2017 upon Dr. Deeg's promotion to Chief Medical Officer. Dr. Deeg's base salary was \$310,000 from his commencement of employment on April 23, 2017 until his promotion.
- (4) Effective as of May 4, 2017 upon Mr. Chevallard's promotion to Chief Financial Officer. Prior to his promotion, Mr. Chevallard's base salary during 2017 was \$247,482.
- (5) Effective commencing January 1, 2017 until Dr. Grint's resignation on May 4, 2017.

In December 2017, the 2018 annual base salaries for Mr. Hagan, Dr. Wright, Dr. Deeg and Mr. Chevallard were approved in the amounts of \$520,000, \$466,967, \$368,100 and \$312,000, respectively, effective as of January 1, 2018.

Annual Performance-Based Bonus Opportunity

The annual performance-based bonus each Named Executive Officer is eligible to receive is based on (1) the individual's target bonus, as a percentage of base salary, (2) a Company-based performance factor ("CPF"), and (3) an individual performance factor ("IPF"). The actual performance-based bonus paid, if any, is calculated by taking into consideration the executive officer's annual base salary, target bonus percentage, percentage attainment of the CPF and percentage attainment of the IPF. Except for the CEO whose entire annual

bonus depends upon the CPF, 10% of each other NEO's annual bonus is also dependent upon such individual's IPF. At the end of the year, our Compensation Committee approves the extent to which we achieved the CPF based on achievement of the corporate goals. The extent to which each individual Named Executive Officer achieves his or her IPF is determined based on our Chief Executive Officer's review and recommendation to our Compensation Committee, except our Chief Executive Officer and our other Named Executive Officers do not make recommendations with respect to their own achievement, and our Compensation Committee makes the final decisions with respect to each IPF. Additionally, our Compensation Committee has the discretion to determine the weighting of each of the goals that comprise the CPF and IPF. Our Compensation Committee may award a bonus in an amount above or below the amount resulting from the calculation described above, based on other factors that our Compensation Committee determines, in its sole discretion, are material to our corporate performance and provide appropriate incentives to our executives, for example based on events or circumstances that arise after the original CPF and IPF goals are set. Our Compensation Committee did not exercise any such discretion in 2017.

Pursuant to their employment agreements, each Named Executive Officer had a target bonus for 2017 represented as a percentage of base salary, or a target bonus percentage, which is subject to modification from time to time in the discretion of our Board of Directors upon recommendation from the Compensation Committee. For 2017, the Compensation Committee determined there would be no change to our target bonus levels and accordingly, our CEO's annual target bonus percentage was 50% of base salary (for each of Mr. Hagan and Dr. Grint) and each of our other NEO's annual target bonus percentage was 40% of base salary. Mr. Hagan's target bonus was increased from 40% to 50% in connection with his promotion to CEO in May 2017. Due to his resignation in May, 2017, Dr. Grint did not earn a performance bonus for 2017. The Compensation Committee determined the target bonuses of each of our NEOs other than our CEO should be consistent to promote internal equity and reinforce teamwork across our leadership team. The Compensation Committee determined our CEO should receive a larger bonus opportunity because he is directly responsible for and has the greatest impact on our company performance.

The CPF and IPF goals are determined by our Compensation Committee and communicated to our Named Executive Officers each year, prior to or shortly following the beginning of the year to which they relate. The CPF is composed of several goals that relate to our annual corporate goals and various business accomplishments which vary from time to time depending on our overall strategic objectives. The IPF is composed of factors that relate to each Named Executive Officer's ability to drive his or her own performance and the performance of his or her direct employee reports towards reaching our corporate goals. The proportional emphasis placed on each goal within the CPF and IPF may vary from time to time depending on our overall strategic objectives and our Compensation Committee's subjective determination of which goals have more impact on our performance.

For 2017, the CPF overall goals related to continuing to advance our RG-012 clinical program, selecting a clinical candidate, and attracting additional capital to advance our research and development initiatives. The specific CPF goals were as follows:

- In the RG-012 Alport program, complete the multiple ascending dose (MAD) study, complete enrollment in the Phase 2 HERA study and complete the biopsy study by year end;
- receive acceptance of one new regulatory filing (IND or similar foreign);
- nominate one additional clinical candidate;
- raise an additional \$30M in 2017; and
- resolve the RG101 Hepatitis C Virus program's clinical hold by pursuing an option 1) off hold, advance program; 2) off hold, terminate program; 3) FDA hold continues, withdraw IND, terminate or pursue ex-US strategy.

In December 2017, after careful review, our Board of Directors, upon the recommendation of our Compensation Committee, concluded that we had achieved 70% of our CPF goals, based on the following:

- we completed the MAD study for RG-012 but, due to changes in the protocol for the HERA and biopsy studies, we did not complete enrollment in the HERA study or complete the biopsy study by the end of 2017;
- we received acceptance of our regulatory filing of our IND for RGLS4326 for the treatment of ADPKD;
- we raised approximately \$46 million in additional capital;
- we terminated the RG-101 program;
- we made significant achievements in the development of new initiatives, including our recruitment of new executives, completion of a corporate restructuring, revision of the RG-012 program to increase probability of success, and commenced a first-in-human dosing of RGLS4326 ahead of schedule;
- we did not nominate one additional clinical candidate.

The IPF goals varied by individual and included individual performance contributions towards maintaining a leading position in *micro*RNA research, accelerating efforts in *micro*RNA therapeutic development, supporting our growth with additional capital, fostering a culture of value creation, attracting and retaining key talent and building good processes and policies. Our Chief Executive Officer did not have IPF goals as his bonus is entirely dependent on our CPF goals, because our Chief Executive Officer has a direct impact on, and responsibility for, our corporate performance.

Based on our CEO's recommendations with respect to each Named Executive Officer, and our Compensation Committee's deliberations with respect to each Named Executive Officer's individual performance against the IPF, our Compensation Committee and Board of Directors approved a performance-based bonus for each of our Named Executive Officers as follows:

<u>Name</u>	<u>Target Bonus (\$)</u>	<u>CPF (%)</u>	<u>IPF (%)</u>	<u>Cash Bonus Paid (\$)</u>
Joseph P. Hagan	\$250,000	100%	0%	\$175,000
Timothy Wright, M.D.	\$181,346	90%	10%	\$134,196 ⁽¹⁾
Mark Deeg, M.D.	\$144,000	90%	10%	\$77,220 ⁽²⁾
Daniel Chevillard	\$120,000	90%	10%	\$96,000 ⁽³⁾

- (1) Dr. Wright's performance-based bonus was approved based on 70% CPF and 110% IPF in recognition of his ability to lead and develop the research and development personnel to advance RGLS4326 into clinical development, to advance our clinical portfolio concerning RG-012, and his leadership in reaching a "no go" decision on the RG-101 program.
- (2) Dr. Deeg's performance-based bonus was approved based on the 70% CPF and 85% IPF in recognition of his revision of the RG-012 clinical program to increase the probability of success, and his initiation of the RGLS4326 clinical program and was prorated for the eight months he had been employed by us during 2017. Dr. Deeg's actual bonus paid was pro-rated for the period of time he was employed with us during 2017 and the actual amount paid was \$27,770 to account for the \$50,000 bonus advance he had received as part of his relocation benefit.
- (3) Mr. Chevillard's performance-based bonus was approved based on the 70% CPF and 120% IPF in recognition of his capital planning and preservation efforts, his leadership in procuring the additional capital to pursue our research and development goals and bringing the Company in line with our operating budget and post-restructuring forecast through the year. Mr. Chevillard's actual bonus paid was adjusted for the period of time during 2017 during which he served as Vice President, Finance and Accounting.

2017 Stock Option Grants

In preparation for making 2017 executive compensation decisions, Compensation Committee evaluated the appropriate form of long-term incentive compensation and has determined to use stock options as the primary incentive for long-term compensation to our Named Executive Officers because they are able to profit from stock options only if our stock price increases relative to the stock option's exercise price. In addition, the Compensation Committee believed that its practice, for the last several years, of also granting stock options that vest based on our achievement of specific Company performance goals, or PSOs, further aligned the Named Executive Officers' interests with our Company goals and the interests of our stockholders over the long-term and as such, PSOs focus key employees on achieving specific performance targets, reinforce a team-oriented approach, and enhance our ability to attract and retain highly talented individuals.

The Compensation Committee believes that stock options, including PSOs, are a key tool in our pay-for-performance philosophy and serve to align the interests of our executive officers with our stockholders' interests. Stock options are inherently performance-based, and automatically link executive pay to stockholder return, as the value realized, if any, by the recipient from a stock option is dependent upon, and directly proportionate to, the appreciation in our stock price and, in the case of PSOs, achievement of performance goals.

2017 Annual Awards

The Compensation Committee granted 2017 annual stock option awards to each of the then-serving Named Executive Officers, consisting of time-vesting stock options and PSOs, in February 2017 and March 2017, respectively. The Compensation Committee set the size of each Named Executive Officer's annual 2017 award considering the individual's position and criticality, individual performance, current equity holdings (and extent to which such holdings were vested and in the money) and the market data. The Compensation Committee intended the time-vesting stock options to serve as incentive and retention grants over a four-year period, while the PSOs were intended to provide incentive and payout opportunity for achievement of specified outcomes concerning our current and future clinical development plans during 2017, which were difficult to achieve. Accordingly, the Compensation Committee determined the PSOs should represent a smaller percentage of the annual grant. Each of the 2017 annual stock option awards to the NEOs were as follows:

Name	Time-Vesting Stock Options (# of shares)	Performance-Vesting Options (PSOs) (# of shares)
Joseph P. Hagan ⁽¹⁾	160,000	50,000
Timothy Wright, M.D.	32,412	60,000
Daniel Chevallard ⁽¹⁾	25,000	20,000
Paul Grint, M.D.	410,000	130,000

- (1) The 2017 annual stock option awards to Mr. Hagan and Mr. Chevallard were granted in respect of their roles as Chief Operating Officer and Vice President, Finance and Accounting, respectively, at such times.

Mid-Year New Hire, Retention and Promotion Grants

In May 2017, the Compensation Committee granted Mr. Hagan a stock option to purchase 750,000 shares and Mr. Chevallard a stock option to purchase 100,000 shares, in connection with each of their promotions to Chief Executive Officer and Chief Financial Officer, respectively. The Compensation Committee carefully evaluated the size of the grants necessary to retain Mr. Hagan and Mr. Chevallard in each of their new roles, and determined, in their subjective assessment, that these amounts were appropriate to reflect their increased responsibilities and experience, while considering each of their performance, current holdings (including the extent to which they were in the money) and internal pay equities amongst the leadership team.

The Compensation Committee granted Dr. Deeg a stock option to purchase 100,000 shares in April 2017 in connection with his commencement of employment with us and an additional stock option to purchase 100,000

shares in June 2017 upon his promotion to Chief Medical Officer. The Compensation Committee determined these grants were appropriate as an inducement, incentive and retention measure, considering Dr. Deeg's prior experience and position, internal pay equity and market data.

The Compensation Committee also granted Dr. Wright a stock option to purchase 350,000 shares in May 2017, when we experienced our significant leadership transition and reduction in force. The Compensation Committee felt this grant was necessary to retain Dr. Wright through a significant period of transition and uncertainty within our company.

<u>Name</u>	<u>Time-Vesting Stock Options (# of shares)</u>
Joseph P. Hagan	750,000
Timothy Wright, M.D.	350,000
Mark Deeg, M.D.	200,000
Daniel Chevallard	100,000

2018 Annual Awards

The Compensation Committee granted 2018 annual stock option awards to each of the then-serving Named Executive Officers, consisting of time-vesting stock options and PSOs, in January 2018 and December 2017, respectively. The Compensation Committee considered each Named Executive Officer's 2017 performance in evaluating these grants. As a result of timing of our annual grants occurring either late in the year or early in the following year (which varied based on the timing of the Compensation Committee's calendar, our available share reserves and performance goal planning), annual equity incentive awards were granted to our Named Executive Officers in 2017 for both the 2017 year and the 2018 year. The time-vesting options vest over a four-year period and the PSOs commence vesting only upon achievement, by year-end 2018, of a future corporate goal that relates to specified outcomes concerning our current and future clinical development plans. Upon achievement of the goal, 50% of the shares subject to the goal immediately vests, and the remaining shares subject to the goal vest in equal installments on a monthly basis thereafter such that all shares shall be vested within two years of the achievement of the goal, provided that the executive continues to provide services to us through such dates.

<u>Name</u>	<u>Time-Vesting Stock Options (# of shares)</u>	<u>Performance-Vesting Options (PSOs) (# of shares)</u>
Joseph P. Hagan	1,000,000	200,000
Timothy Wright, M.D.	500,000	100,000
Mark Deeg, M.D.	175,000	50,000
Daniel Chevallard	350,000	50,000

Achievement of PSO Performance Goals during 2017

In December 2017, the Compensation Committee determined that we did not achieve a 2017 performance goal related to clinical development on which PSOs previously granted to our Named Executive Officers in 2016 were based. As a result, the Compensation Committee cancelled PSOs in the amount of 50,000 stock options, 60,000 stock options and 20,000 stock options held by Mr. Hagan, Dr. Wright and Mr. Chevallard, respectively. Also in December of 2017, the Compensation Committee cancelled a PSOs previously granted to Mr. Hagan in 2016 in the amount of 45,000 options, as the goal, related to clinical development, was not achieved. Also in December 2017, the Compensation Committee determined that Dr. Wright achieved a 2017 performance goal related to the acceptance of the IND for RGLS4326 and as a result, a portion of a PSO granted to Dr. Wright in 2016 vested in full.

Other Executive Compensation Matters

Employment Agreements

The Company has employment agreements with each of our Named Executive Officers that provide for the basic terms of their employment, including base salary, performance bonus opportunity and equity grants, as well as certain severance and change in control benefits. During 2017, we entered into a new employment agreement with Dr. Deeg and with Mr. Chevallard in connection with each of such executive's commencement of employment and promotion, respectively, under terms similar to the terms of the agreements with our other Named Executive Officers. The Compensation Committee determined the initial compensation provisions of each of Dr. Deeg's and Mr. Chevallard's employment agreement based on the terms the Compensation Committee felt necessary to induce and incentivize each executive in his new role, while remaining reasonable in comparison to market data and consistent with the terms of our other leadership team members. The terms of these agreements are described in greater detail in the section titled "Employment Agreements with Named Executive Officers" below. All of the named executive officers are "at-will" employees.

Change in Control and Severance Benefits

Under the terms of the employment agreements with each of our Named Executive Officers, either we or the executive may terminate the executive's employment at any time. Each of our Named Executive Officers is eligible, under the terms of his respective employment agreement, to receive, in exchange for a release of claims, severance benefits upon the termination of his employment either by us without cause or by him for good reason, with additional severance benefits provided in the event the termination is in connection with a change in control. In addition, the terms of the equity awards granted to our Named Executive Officers are subject to the terms of our equity plans and award agreements thereunder, which includes accelerated vesting provisions upon certain material change in control transactions. The terms and conditions of severance benefits are discussed more fully in the section below under the heading "—Potential Payments upon Termination or Change in Control" and the terms and conditions of our equity plans are discussed more fully in the section below under the heading "—Equity Compensation Plans and Other Benefit Plans". We do not provide any excise tax gross ups on change-in-control benefits.

These agreements reflect the negotiations with our named executive officers at the time we entered into the agreements, as well as our desire to have a consistent set of benefits across the executive team. The Compensation Committee considers these severance benefits critical to attracting and retaining high-caliber executives. Additionally, the Compensation Committee believes that additional change-in-control severance benefits minimize the distractions to an executive in connection with a corporate transaction and reduce the risk that an executive officer departs our company before a transaction is completed and that change in control accelerated equity vesting provisions reflect current market practices, based on the collective knowledge and experiences of our Compensation Committee members, and allow us to attract and retain highly qualified executive officers. The Compensation Committee believes that our existing arrangements allow our executive officers to focus on continuing normal business operations and, in the case of change-in-control benefits, on the success of a potential business combination, rather than worry about how business decisions that may be in our best interest will impact their own financial security. These existing arrangements help ensure stability among our executive officer ranks, and will help enable our executives to maintain a balanced perspective in making overall business decisions during periods of uncertainty.

In connection with Dr. Grint's resignation in May 2017, Dr. Grint received severance benefits, including cash payments and equity acceleration, as further described below under the heading "—Employment Agreements with Named Executive Officers". The Board of Directors determined this level of benefits, which was equivalent to the non-change in control severance benefits provided for in Dr. Grint's employment agreement, was appropriate in recognition of Dr. Grint's services to us and his execution of an effective release and waiver of claims. In addition, Dr. Grint was provided an extended period to exercise his vested stock options, which the Board of Directors determined was necessary and appropriate, given Dr. Grint's services to us and the fact that all of his options were underwater at the time of his termination.

Perquisites, Health, Welfare and Retirement Benefits

Our Named Executive Officers are eligible to participate in all of our employee benefit plans, including our medical, dental, vision, group life and disability insurance plans, in each case on the same basis as other employees. We provide 401(k) matching contributions as discussed in the section below entitled “Equity Compensation Plans and Other Benefit Plans—401(k) Plan.”

We also pay the premiums for term life insurance and long-term disability for all of our employees, including our Named Executive Officers. None of our Named Executive Officers participate in or have account balances in qualified or non-qualified defined benefit plans sponsored by us. We generally do not provide perquisites or personal benefits to our Named Executive Officers, although we may from time to time provide signing bonuses or other reasonable benefits as our Compensation Committee determines appropriate. In connection with Mr. Deeg’s commencement of employment, we agreed to provide a signing bonus as well as relocation and housing-related assistance. The Compensation Committee felt these benefits were necessary to induce Mr. Deeg to join us and also carefully structured the signing bonus and relocation expense to be repayable if Dr. Deeg is terminated or resigns under certain circumstances within the first three years of employment, and provided that the down payment was creditable against future merit bonuses which Dr. Deeg earns from us (and accordingly, Dr. Deeg’s 2017 earned performance bonus amount was reduced by the size of his benefit). The terms of Dr. Deeg’s benefits are further described below under the heading “—Employment Agreements with Named Executive Officers”.

Equity Grant Timing and Equity Plan Information

The Compensation Committee does not currently maintain a formal policy for the timing of equity awards to our executive officers and has granted awards over the past several years at times when the Compensation Committee determines appropriate. We generally provide initial grants in connection with the commencement of employment of our Named Executive Officers and any material promotions, as well as annual retention grants at or shortly following the end of each year or more frequently as our Compensation Committee and Board of Directors determines appropriate.

Since October 2012, all stock options have been granted pursuant to our 2012 Equity Incentive Plan (the “2012 Plan”) or the 2015 Inducement Plan (“2015 Inducement Plan”), the terms of which are described below under “Equity Compensation Plans and Other Benefits Plans—2012 Equity Incentive Plan” and “Equity Compensation Plans and Other Benefits Plans—2015 Inducement Plan,” respectively.

Compensation Recovery Policy

As a public company subject to Section 304 of the Sarbanes-Oxley Act of 2002, if we are required to restate our financial results as the result of misconduct or due to our material noncompliance with any financial reporting requirements under the federal securities laws, our CEO and CFO may be legally required to reimburse us for any bonus or incentive-based or equity-based compensation they receive during the relevant period. In addition, we will comply with the requirements of the Dodd-Frank Wall Street Reform and Consumer Protection Act and will evaluate adopting a compensation recovery policy once final regulations on the subject have been adopted.

Deductibility of Executive Compensation Under Code Section 162(m)

The Compensation Committee considers the potential future effects of Section 162(m) of the Internal Revenue Code (“Section 162(m)”) on the compensation paid to our executive officers. Section 162(m) of the Code generally provides that publicly held companies may not deduct compensation paid to certain of their top executive officers to the extent such compensation exceeds \$1 million per officer in any year. The exemption from the deduction limit under Section 162(m) of the Code for “performance-based compensation” has been

repealed, effective for taxable years beginning after December 31, 2017, such that compensation paid to our “covered employees” in excess of \$1 million will not be deductible unless it qualifies for transition relief applicable to certain arrangements in place as of November 2, 2017. The Compensation Committee will continue to monitor the applicability of Section 162(m) of the Code to its ongoing compensation arrangements. Because of ambiguities and uncertainties as to the application and interpretation of Section 162(m) of the Code and the regulations issued thereunder, including the uncertain scope of the transition relief under the legislation repealing the “performance-based compensation” exemption from the deduction limit, no assurance can be given that any compensation that may have been (or, if granted under a binding written contract in place as of November 2, 2017, may be) intended to satisfy the requirements for exemption from Section 162(m) of the Code in fact will. In determining the form and amount of compensation for our named executive officers, the Compensation Committee may continue to consider all elements of the cost of such compensation, including the potential impact of Section 162(m). While the Compensation Committee considers the deductibility of awards as one factor in determining executive compensation, the Compensation Committee also looks at other factors in making its decisions and retains the flexibility to award compensation that it determines to be consistent with the goals of our executive compensation program even if the awards are not deductible by us for tax purposes.

Accounting Considerations

The accounting impact of our executive compensation program is one of many factors that the Compensation Committee considers in determining the size and structure of that program. Under Financial Accounting Standard Board ASC Topic 718, or ASC 718, we are required to estimate and record an expense for each award of equity compensation over the vesting period of the award. We record share-based compensation expense on an ongoing basis according to ASC 718. The Compensation Committee has considered, and may in the future consider, the grant of performance-based or other types of stock awards to executive officers in lieu of or in addition to stock option and restricted stock unit award grants in light of the accounting impact of ASC 718 and other considerations.

SUMMARY COMPENSATION TABLE

The following table shows, for the fiscal years ended December 31, 2017, December 31, 2016, and December 31, 2015, compensation awarded to, paid to, or earned by, the Named Executive Officers.

<u>Name and Principal Position</u>	<u>Year</u>	<u>Salary</u>	<u>Bonus</u>	<u>Option Awards</u>	<u>Non-Equity Incentive Plan Compensation</u>	<u>All Other Compensation</u>	<u>Total</u>
		<u>(\$)</u>	<u>(\$)</u>	<u>(\$)(1)</u>	<u>(\$)(2)</u>	<u>(\$)(3)</u>	<u>(\$)</u>
Joseph P. Hagan <i>President & Chief Executive Officer</i>	2017	475,300 ⁽⁴⁾	—	1,268,367	175,000	3,827	1,922,494
	2016	413,670	100,000	3,326,416	107,900	2,293	3,950,279
Timothy Wright, M.D. <i>Chief Research & Development Officer</i>	2017	453,366	—	596,145	134,196	5,350	1,189,057
	2016	112,500	110,000	1,999,028	28,721	1,526	2,251,775
Mark Deeg, M.D., Ph.D. <i>Chief Medical Officer</i>	2017	261,474 ⁽⁵⁾	36,000	220,515	27,220	60,040 ⁽⁶⁾	605,249
Daniel R. Chevallard <i>Chief Financial Officer</i>	2017	281,897 ⁽⁷⁾	—	197,474	96,000	5,262	580,633
Paul Grint, M.D. ⁽⁸⁾ <i>Former President and Chief Executive Officer</i>	2017	190,365	—	927,226	—	595,063	1,712,654
	2016	515,000	—	2,195,583	154,500	4,551	2,869,634
	2015	446,532	—	4,306,175	250,000	4,022	5,006,729

(1) In accordance with SEC rules, this column reflects the aggregate grant date fair value of the option awards granted during the years indicated, computed in accordance with Financial Accounting Standard Board ASC Topic 718 for stock-based compensation transactions, or ASC 718. Assumptions used in the calculation of these amounts are included in Note 10 to the Financial Statements in our Annual Report on Form 10-K for the year ended December 31, 2017. These amounts do not reflect the actual economic value that will be realized by the Named Executive Officer upon the vesting of the stock options, the exercise of the stock options, or the sale of the common stock underlying such stock options.

The grant date fair value of the option awards granted during 2017 that vest based on performance conditions is reported based on the probable outcome of such performance conditions, as determined in accordance with ASC 718, which is the same as the grant date fair value of such awards at the grant date, assuming that the highest level of performance conditions will be achieved.

- (2) Amounts shown represent performance bonuses earned for the years indicated.
- (3) Amounts shown include term life insurance and long-term disability insurance paid by us on behalf of the Named Executive Officers and matching contributions we paid under the terms of our 401(k) plan. All of these benefits are provided to the Named Executive Officers on the same terms as provided to all of our regular full-time employees in the United States. For more information regarding these benefits, see below under "Perquisites, Health, Welfare and Retirement Benefits."
- (4) Mr. Hagan's base salary was increased from \$427,500 to \$500,000 upon his promotion to Chief Executive Officer on May 4, 2017.
- (5) Dr. Deeg joined us on April 23, 2017. Dr. Deeg's base salary was increased from \$310,000 to \$360,000 upon his promotion to Chief Medical Officer on June 22, 2017.
- (6) In addition to the items described in Note 3, the total also includes temporary housing and relocation expenses paid to Dr. Deeg in 2017 of \$7,882. In addition, Dr. Deeg received a \$50,000 advance on his annual bonus to use as a down payment on a home in San Diego. As a result, his annual performance bonus for 2017, set forth in the column entitled "Non-Equity Incentive Plan Compensation" reflects the \$50,000 credit against the bonus awarded to Dr. Deeg at year end, which was \$77,220.
- (7) Mr. Chevallard's base salary was increased from \$247,482 to \$300,000 upon his promotion to Chief Financial Officer on May 4, 2017.
- (8) Dr. Grint resigned effective May 4, 2017. Dr. Grint received certain severance benefits in connection with his resignation, as described in more detail under "Employment Agreements with Named Executive Officers." The amount shown in "Option Awards" column for Dr. Grint includes the incremental fair value (\$429,386), computed as of the modification date in accordance with ASC 718, of the modification of Dr. Grint's stock options to extend the time in which Dr. Grint was permitted to exercise all of his outstanding options, pursuant to the terms of his severance agreement. The amount shown in "All Other Compensation" column for Dr. Grint includes \$592,867 in cash severance payments to Dr. Grint pursuant to the terms of his severance agreement, all of which was paid in May 2017.

The compensation of our Named Executive Officers is generally determined and approved by our Compensation Committee, who recommends its decisions to our Board of Directors. Our Board of Directors, without members of management present, ultimately ratifies and approves all compensation decisions.

Grants of Plan-Based Awards During the Fiscal Year Ended December 31, 2017

The following table sets forth certain information regarding plan based-awards granted by the Company during the year ended December 31, 2017 to the NEOs below:

Name	Grant Date	Estimated Future Payouts Under Non-Equity Incentive Plan Awards Target (1)	Estimated Future Payouts Under Equity Incentive Plan Awards Target		All Other Stock Awards: Number of Shares of Stock or Units (#)	All Other Option Awards: Number of Securities Underlying Options (#) (2)	Exercise Price of Awards (\$/Sh) (2)	Grant Date Fair Value or Fair Value Related to Modification of Awards (\$)(3)
		Target (\$)	Threshold (#)	Target and Maximum (#)				
Joseph P. Hagan	—	250,000			—	—	—	—
	12/04/2017(4)		100,000	200,000	—	—	0.89	129,960
	05/04/2017				—	750,000	1.70	944,876
	03/14/2017(4)		25,000	50,000	—	—	1.40	51,150
Timothy Wright, M.D.	02/15/2017				—	160,000	1.20	142,380
	—	181,346			—	—	—	—
	12/04/2017(4)		50,000	100,000	—	—	0.89	64,980
	05/04/2017				—	350,000	1.70	440,942
Mark Deeg, M.D., Ph.D.	03/14/2017(4)		30,000	60,000	—	—	1.40	61,380
	02/15/2017				—	32,412	1.20	28,843
	—	144,000			—	—	—	—
	12/04/2017(4)		25,000	50,000	—	—	\$ 0.89	\$ 32,490
Daniel Chevallard	06/22/2017				—	100,000	\$ 0.99	\$ 76,635
	04/03/2017				—	100,000	\$ 1.50	\$ 111,390
	—	120,000			—	—	—	—
	12/04/2017(4)		25,000	50,000	—	—	0.89	32,490
Paul Grint, M.D.	05/10/2017				—	100,000	1.65	122,278
	03/14/2017(4)		10,000	20,000	—	—	1.40	20,460
	02/15/2017				—	25,000	1.20	22,247
	—	272,950			—	—	—	—
	02/15/2017				—	410,000	1.20	488,881
	03/14/2017(4)(5)		65,000	130,000	—	—	1.40	132,990
	05/04/2017(6)				—	186,640	3.52	77414
	05/04/2017(6)				—	265,000	6.35	61,978
	05/04/2017(6)				—	130,000	6.35	30,405
05/04/2017(6)				—	500,000	10.22	62,351	
05/04/2017(6)				—	50,870	17.76	2,611	
05/04/2017(6)				—	250,000	7.58	46,961	
05/04/2017(6)				—	30,000	7.58	5,635	

- (1) The amounts reflect the dollar amount of each Named Executive Officer's target annual performance-based bonus for 2017, each of which represented a percentage of such Named Executive Officer's 2017 annual base salary as specified under the Named Executive Officer's employment agreement, as subsequently increased by the Compensation Committee, if applicable. There is no minimum or maximum amount

payable for a certain level of performance. The target amount shown for Dr. Deeg is adjusted to reflect a pro-rated target bonus amount based on his employment inception date in April 2017. Dr. Grint did not earn or receive a performance bonus due to his separation from our company prior to December 31, 2017. The target bonuses and annual performance-based bonus program for our Named Executive Officers are described in more detail under “Compensation Discussion and Analysis—Annual Performance-Based Bonus Opportunity.”

- (2) All options were granted and approved on the same date with option awards having an exercise price equal to the closing market price of the Company’s common stock on the date of grant. All time-based option awards vest monthly, on a pro-rata basis, over four years and have an option term of ten years.
- (3) Reflects the grant date Black-Scholes value for each option awards which was calculated in accordance with ASC 718.
- (4) Denotes a Performance-Based stock option award which will only vest upon achievement of a corporate milestone. Upon achievement of the milestones, 50% of the options immediately vest and the remaining options vest in 24 equal monthly installments and have an option term of ten years.
- (5) Denotes a Performance-Based stock option award that was not earned at the time of Dr. Grint’s resignation and therefore was cancelled.
- (6) Dr. Grint resigned from Regulus effective May 4, 2017. Dr. Grint received certain severance benefits in connection with his resignation, as described in more detail under “Employment Agreements with Named Executive Officers.” The amount shown in “Fair Value Related to Modification of Awards” column for Dr. Grint includes the incremental fair value, computed as of the modification date in accordance with ASC 718, of the modification of Dr. Grint’s stock options to extend the time in which Dr. Grint was permitted to exercise all of his outstanding options, pursuant to the terms of his resignation.

Compensation Committee Interlocks and Insider Participation

As indicated above, the Compensation Committee currently consists of Dr. Baltimore, Dr. Papadopoulos, Dr. Rastetter and Dr. Rosen. No member of the Compensation Committee has ever been an officer or employee of ours. None of our executive officers currently serves, or has served during the last completed fiscal year, on the compensation committee or board of directors of any other entity that has one or more executive officers serving as a member of our Board of Directors or Compensation Committee.

Outstanding Equity Awards at Fiscal Year-End

The following table shows certain information regarding outstanding equity awards as of December 31, 2017 for the Named Executive Officers.

Name	Grant Date(1)	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Options (#)	Option Exercise Price (\$)	Option Expiration Date
Joseph P. Hagan	12/04/2017(4)			200,000	\$ 0.89	12/3/2027
	05/04/2017(2)		750,000		\$ 1.70	5/3/2027
	02/15/2017(2)		160,000		\$ 1.20	2/14/2027
	10/05/2016(2)	17,391	42,234		\$ 3.52	10/4/2026
	02/01/2016(3)	21,875	8,125		\$ 5.77	1/31/2026
	01/04/2016(2)	11,668	32,086		\$ 8.57	1/3/2026
	01/04/2016*(2)	189,582	186,664		\$ 8.57	1/3/2026
Timothy Wright, M.D.	12/04/2017(4)			100,000	\$ 0.89	12/3/2027
	05/04/2017(2)		350,000		\$ 1.70	5/3/2027
	02/15/2017(2)		32,412		\$ 1.20	2/14/2027
	10/03/2016(2)	131,250	136,944		\$ 3.30	10/2/2026
	10/03/2016*(5)	100,000		300,000	\$ 3.30	10/2/2026
	10/03/2016*(2)		181,086		\$ 3.30	10/2/2026
Mark Deeg, M.D.	12/04/2017(4)			50,000	\$ 0.89	12/3/2027
	06/22/2017(2)		100,000		\$ 0.99	6/21/2027
	04/03/2017(2)		100,000		\$ 1.50	4/2/2027
Daniel Chevallard	12/04/2017(4)			50,000	\$ 0.89	12/3/2027
	05/10/2017(2)		100,000		\$ 1.65	5/9/2027
	02/15/2017(2)		25,000		\$ 1.20	2/14/2027
	10/05/2016(2)	12,990	31,547		\$ 3.52	10/4/2026
	02/01/2016(2)	19,166	20,834		\$ 5.77	1/31/2026
	02/01/2016(3)	14,583	5,417		\$ 5.77	1/31/2026
	12/02/2014(2)	25,521	9,479		\$ 17.76	12/1/2024
	12/12/2013(2)	34,270	730		\$ 6.13	12/11/2023
	12/03/2012(2)	58,000			\$ 4.81	12/1/2022
Paul Grint, M.D. (6)	02/15/2017	410,000			\$ 1.20	5/3/2018
	10/05/2016	186,640			\$ 3.52	5/3/2018
	02/04/2016	395,000			\$ 6.35	5/3/2018
	06/25/2015	500,000			\$ 10.22	5/3/2018
	12/02/2014	50,870			\$ 17.76	5/3/2018
	06/16/2014	320,000			\$ 7.58	5/3/2018

- (1) All of the options were granted under the 2012 Plan, except for those granted pursuant to the 2015 Inducement Plan, which are indicated in the above table with an asterisk (*). All of the options were granted with a per share exercise price equal to the fair market value of our common stock on the date of grant and become exercisable as they vest. The terms of the 2012 Plan and the 2015 Inducement Plan are described below under “Equity Compensation Plans and Other Benefit Plans.” The vesting of the time-based options accelerates upon termination of employment of the Named Executive Officer by us without cause or by the officer for good reason, as described below under “Employment Agreements with Named Executive Officers.”

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- (2) 25% of the shares subject to the option vests on the one year anniversary of the grant date, and 1/48th of the total number of shares subject to the option vests on the first day of each month thereafter, provided that the option holder continues to provide services to us through such dates.
 - (3) The option vests only upon achievement of specified performance goals before the end of 2016. Upon achievement of the goal, 50% of the shares subject to the goal immediately vest, and 1/24th of the total number of shares subject to the option vest thereafter on the first day of each month, provided that the holder continues to provide services to us through such dates. On January 30, 2017, the Compensation Committee determined the goal had been achieved by the end of 2016 and these options commenced vesting on that date.
 - (4) The option vests only upon the achievement of a specified performance goal on or before December 31, 2018, which had not occurred prior to December 31, 2017.
 - (5) The option vests only upon the achievement of four specified performance goals on or before December 31, 2019. On December 4, 2017, the Compensation Committee determined that one of the specified goals had been achieved and 100,000 options immediately vested. As of December 31, 2017, achievement of the three remaining performance goals had not occurred. Upon the achievement of each goal, 100% of the shares subject to the goal immediately vests.
 - (6) Dr. Grint resigned from the Company effective May 4, 2017. In connection with his resignation, all time-based options were accelerated and exercise of such options are required to be completed by May 4, 2018. Any unexercised options as of that date will be canceled. Performance-based options with performance goals that had not been achieved as of the resignation date were canceled.

Employment Agreements with Named Executive Officers

We entered into employment agreements with each of our Named Executive Officers. The agreements provide for at will employment and for certain base salary, target bonus and severance payments to our Named Executive Officers.

Employment Agreement with Mr. Hagan. In December 2015, we entered into an employment agreement with Mr. Hagan, with an effective date of January 1, 2016. Pursuant to his employment agreement, Mr. Hagan is entitled to receive an annual base salary of \$415,000 and is eligible to receive an annual performance bonus, with a target bonus amount of 40% of his annual base salary. Mr. Hagan's base salary and target bonus are subject to periodic review and adjustment from time to time in the discretion of our Board of Directors or the Compensation Committee. Pursuant to Mr. Hagan's employment agreement, we agreed to pay Mr. Hagan a signing bonus of \$100,000, payable in a lump sum upon Mr. Hagan's commencement of employment with us. All or a portion of the signing bonus is repayable in the event Mr. Hagan is terminated for cause or if he voluntarily resigns without good reason within the first three years of his employment, which amount varies depending on when such termination or resignation occurs within such three year period. In May 2017, Mr. Hagan was appointed as our President and CEO. At that time, his base salary was increased to \$500,000 (increased most recently to \$520,000) and his target bonus was increased to 50%. Additionally, Mr. Hagan's employment agreement provides for the grant of stock option awards, which were made in January 2016. Pursuant to Mr. Hagan's employment agreement, all outstanding stock options subject to vesting based on Company performance that are held by Mr. Hagan immediately before a change in control shall become fully vested and exercisable as of immediately before, and contingent upon, the change in control, provided that Mr. Hagan remains employed by us as of such date.

If we terminate Mr. Hagan's employment without cause (other than due to his death or complete disability) or if Mr. Hagan resigns for good reason at any time other than during the period beginning one month before and ending 12 months following a change in control, Mr. Hagan will receive, subject to receiving an effective release and waiver of claims from him, (1) a lump sum severance payment equal to 12 months of his base salary in effect at the time of such termination or resignation (disregarding any decrease that forms the basis for a resignation for good reason), (2) a lump sum cash amount equal to 229.56% multiplied by the total cost of the projected premiums for group medical, dental and vision insurance for a period of 12 months and (3) vesting acceleration

of all outstanding options and other equity incentive awards subject to time-based vesting held by Mr. Hagan as of such termination or resignation.

If we terminate Mr. Hagan's employment without cause (other than due to his death or complete disability) or if Mr. Hagan resigns for good reason, in each case during the period beginning one month before and ending 12 months following a change in control, in addition to the severance payment described above, we will also be obligated to pay Mr. Hagan, subject to receiving an effective release and waiver of claims from him, a lump sum payment equal to the target amount of Mr. Hagan's annual performance bonus for the year of termination or resignation.

Employment Agreement with Dr. Wright. In October 2016, we entered into an employment agreement with Dr. Wright, with an effective date of October 3, 2016. Pursuant to his employment agreement, Dr. Wright is entitled to receive an annual base salary of \$450,000 (increased most recently to \$466,967) and is eligible to receive an annual performance bonus, with a target bonus amount of 40% of his annual base salary. Commencing in 2018, Dr. Wright's target bonus was increased to 50%. Dr. Wright's base salary and target bonus are subject to periodic review and adjustment from time to time in the discretion of our Board of Directors or the Compensation Committee. Pursuant to Dr. Wright's employment agreement, we agreed to pay Dr. Wright a signing bonus of \$110,000, payable in a lump sum upon Dr. Wright's commencement of employment with us. All or a portion of the signing bonus is repayable in the event Dr. Wright is terminated for cause or if he voluntarily resigns without good reason within the first three years of his employment, which amount varies depending on when such termination or resignation occurs within such three year period. Additionally, Dr. Wright's employment agreement provides for the grant of stock option awards, which were made in October 2016. Pursuant to Dr. Wright's employment agreement, all outstanding stock options subject to vesting based on Company performance that are held by Dr. Wright immediately before a change in control shall become fully vested and exercisable as of immediately before, and contingent upon, the change in control, provided that Dr. Wright remains employed by us as of such date.

If we terminate Dr. Wright's employment without cause (other than due to his death or complete disability) or if Dr. Wright resigns for good reason at any time other than during the period beginning one month before and ending 12 months following a change in control, Dr. Wright will receive, subject to receiving an effective release and waiver of claims from him, (1) a lump sum severance payment equal to 12 months of his base salary in effect at the time of such termination or resignation (disregarding any decrease that forms the basis for a resignation for good reason), (2) a lump sum cash amount equal to 229.56% multiplied by the total cost of the projected premiums for group medical, dental and vision insurance for a period of 12 months and (3) vesting acceleration of all outstanding options and other equity incentive awards subject to time-based vesting held by Dr. Wright as of such termination or resignation.

If we terminate Dr. Wright's employment without cause (other than due to his death or complete disability) or if Dr. Wright resigns for good reason, in each case during the period beginning one month before and ending 12 months following a change in control, in addition to the severance payment described above, we will also be obligated to pay Dr. Wright, subject to receiving an effective release and waiver of claims from him, a lump sum payment equal to the target amount of Dr. Wright's annual performance bonus for the year of termination or resignation.

Employment Agreement with Dr. Deeg. In April 2017, we entered into an employment agreement with Dr. Deeg, with an effective date of April 3, 2017. Upon his elevation to Chief Medical Officer, we entered into an Amended and Restated Employment Agreement with an effective date of June 22, 2017. Pursuant to his employment agreement, Dr. Deeg is entitled to receive an annual base salary of \$360,000 (increased most recently to \$368,100) and is eligible to receive an annual performance bonus, with a target bonus amount of 40% of his annual base salary. Commencing in 2018, Dr. Deeg's target bonus was increased to 50%. Dr. Deeg's base salary and target bonus are subject to periodic review and adjustment from time to time in the discretion of our Board of Directors or the Compensation Committee. Pursuant to Dr. Deeg's April 2017 employment agreement,

we agreed to pay Dr. Deeg a signing bonus of \$36,000, payable in a lump sum upon Dr. Deeg's commencement of employment with us. In addition, we agreed to pay Dr. Deeg up to \$39,000 in relocation and temporary housing expenses and four roundtrip airfares for such purposes. In addition we agreed to pay Dr. Deeg a lump-sum of \$50,000 toward the down payment of a home in San Diego. The down payment was creditable against any future merit bonus which may be paid to Dr. Deeg until fully credited; accordingly, Dr. Deeg's performance bonus earned for 2017 was reduced by \$50,000. All or a portion of the signing bonus and relocation expense is repayable in the event Dr. Deeg is terminated for cause or if he voluntarily resigns without good reason within the first three years of his employment, which amount varies depending on when such termination or resignation occurs within such three year period. Additionally, Dr. Deeg's employment agreement provides for the grant of stock option awards, which were made in April 2017, as further described above under "Compensation Discussion and Analysis – 2017 Stock Option Grants." Pursuant to Dr. Deeg's employment agreement, all outstanding stock options subject to vesting based on Company performance that are held by Dr. Deeg immediately before a change in control shall become fully vested and exercisable as of immediately before, and contingent upon, the change in control, provided that Dr. Deeg remains employed by us as of such date.

If we terminate Dr. Deeg's employment without cause (other than due to his death or complete disability) or if Dr. Deeg resigns for good reason at any time other than during the period beginning one month before and ending 12 months following a change in control, Dr. Deeg will receive, subject to receiving an effective release and waiver of claims from him, (1) a lump sum severance payment equal to 12 months of his base salary in effect at the time of such termination or resignation (disregarding any decrease that forms the basis for a resignation for good reason), (2) a lump sum cash amount equal to 229.56% multiplied by the total cost of the projected premiums for group medical, dental and vision insurance for a period of 12 months and (3) vesting acceleration of all outstanding options and other equity incentive awards subject to time-based vesting held by Dr. Deeg as of such termination or resignation.

If we terminate Dr. Deeg's employment without cause (other than due to his death or complete disability) or if Dr. Deeg resigns for good reason, in each case during the period beginning one month before and ending 12 months following a change in control, in addition to the severance payment described above, we will also be obligated to pay Dr. Deeg, subject to receiving an effective release and waiver of claims from him, a lump sum payment equal to the target amount of Dr. Deeg's annual performance bonus for the year of termination or resignation.

Employment Agreement with Mr. Chevallard. In May 2017, we entered into an amended and restated employment agreement with Mr. Chevallard upon his elevation to Chief Financial Officer with an effective date of May 24, 2017. Pursuant to his amended and restated employment agreement, Mr. Chevallard is entitled to receive an annual base salary of \$300,000 (increased most recently to \$312,000) and is eligible to receive an annual performance bonus, with a target bonus amount of 40% of his annual base salary. Commencing in 2018, Mr. Chevallard's target bonus was increased to 50%. Mr. Chevallard's base salary and target bonus are subject to periodic review and adjustment from time to time in the discretion of our Board of Directors or the Compensation Committee. Additionally, upon Mr. Chevallard's elevation to Chief Financial Officer, he was also provided an additional grant of stock option awards, which were made in May 2017, as further described above under "Compensation Discussion and Analysis – 2017 Stock Option Grants." Pursuant to Mr. Chevallard's employment agreement, all outstanding stock options subject to vesting based on Company performance that are held by Mr. Chevallard immediately before a change in control shall become fully vested and exercisable as of immediately before, and contingent upon, the change in control, provided that Mr. Chevallard remains employed by us as of such date.

If we terminate Mr. Chevallard's employment without cause (other than due to his death or complete disability) or if Mr. Chevallard resigns for good reason at any time other than during the period beginning one month before and ending 12 months following a change in control, Mr. Chevallard will receive, subject to receiving an effective release and waiver of claims from him, (1) a lump sum severance payment equal to 12

months of his base salary in effect at the time of such termination or resignation (disregarding any decrease that forms the basis for a resignation for good reason), (2) a lump sum cash amount equal to 229.56% multiplied by the total cost of the projected premiums for group medical, dental and vision insurance for a period of 12 months and (3) vesting acceleration of all outstanding options and other equity incentive awards subject to time-based vesting held by Mr. Chevallard as of such termination or resignation.

If we terminate Mr. Chevallard's employment without cause (other than due to his death or complete disability) or if Mr. Chevallard resigns for good reason, in each case during the period beginning one month before and ending 12 months following a change in control, in addition to the severance payment described above, we will also be obligated to pay Mr. Chevallard, subject to receiving an effective release and waiver of claims from him, a lump sum payment equal to the target amount of Mr. Chevallard's annual performance bonus for the year of termination or resignation.

Employment Agreement with Dr. Grint. In September 2014, we entered into an amended and restated employment agreement with Dr. Grint, which replaced and superseded his previous agreement entered into in June 2014. Pursuant to his amended and restated employment agreement, Dr. Grint was entitled to an initial annual base salary of \$360,500 (increased most recently to \$545,900) and an annual performance bonus based on a target amount of his annual base salary (increased most recently to 50%). Dr. Grint's base salary and target bonus percentage were subject to modification from time to time in the discretion of our Board of Directors or any authorized committee thereof.

In May of 2017, Dr. Grint resigned from the Company. In connection with his resignation, and in exchange for our receipt of an effective release and waiver of claims from Dr. Grint, Dr. Grint received (1) a severance payment equal to 12 months of his base salary in effect at the time of his resignation paid in a lump sum, (2) a lump sum cash amount equal to 229.56% multiplied by the total cost of the projected premiums for group medical, dental and vision insurance for a period of 12 months and (3) vesting acceleration of all outstanding options held by Dr. Grint that were subject to time-based vesting as of the time of his resignation. In addition, the post-termination exercise period of all outstanding options held by Dr. Grint was extended to 365 days following the date of his resignation.

None of the Named Executive Officers' employment agreements provide for the gross up of any excise taxes imposed by Section 4999 of the Code. If any of the payments under the employment agreements would constitute a "parachute payment" within the meaning of Section 280G of the Code, subject to the excise tax imposed by Section 4999 of the Code, the employment agreements provide for a best-after tax analysis with respect to such payments, under which the executive will receive whichever of the following two alternative forms of payment would result in the executive officer's receipt, on an after-tax basis, of the greater amount of the transaction payment notwithstanding that all or some portion of the transaction payment may be subject to the excise tax: (i) payment in full of the entire amount of the transaction payment, or (ii) payment of only a part of the transaction payment so that the executive receives the largest payment possible without the imposition of the excise tax.

For purposes of the Named Executive Officer employment agreements, other than during the period beginning one month before and ending 12 months following a change in control, "cause" generally means the executive officer's: (i) commission of any felony or crime involving fraud, dishonesty or moral turpitude under the laws of the United States or any state thereof; (ii) attempted commission of, or participation in, a fraud or act of dishonesty against us; (iii) intentional, material violation of any contract or agreement between the executive officer and us or of any statutory duty owed to us; (iv) unauthorized use or disclosure of our confidential information or trade secrets; or (v) gross misconduct. During the period beginning one month before and ending 12 months following a change in control, "cause" generally means the executive officer's: (I) conviction of any felony or any crime involving fraud, dishonesty or moral turpitude under the laws of the United States or any state thereof; (II) commission of an intentional act of fraud, embezzlement or theft by the executive officer in the course of the executive officer's employment by us; (III) intentional, material violation of any contract or

agreement between the executive officer and us (including the employment agreement) or of any statutory duty owed to us which is not remedied within 30 days' written notice from us specifying such failure; (IV) intentional and unauthorized use or disclosure of our confidential information or trade secrets which is materially and demonstrably injurious to us; or (V) gross misconduct.

For purposes of the Named Executive Officer employment agreements, "good reason" means the occurrence of one or more of the following events (at a time other than within one month before or 12 months following a change in control), subject to the executive providing us with at least 90 days of his intent to terminate for such "good reason" and our failure to remedy the condition within a 30-day cure period (provided, any subsequent proposed voluntary resignation for "good reason" will not be curable): (i) our material breach of the executive officer's employment agreement; (ii) a material reduction of the executive officer's base salary; (ii) a material reduction of the executive officer's authority, duties or responsibilities; or (iii) a relocation of the facility that is the executive officer's principal place of business to a location that requires an increase in the executive officer's one-way driving distance by more than 35 miles. Within one month before or 12 months following a change in control, "good reason" means the occurrence of one of the following without the executive officer's express, written consent: (I) a significant reduction of the executive officer's duties, position or responsibilities (including, without limitation, any negative change in reporting hierarchy involving the executive or the person to whom the executive directly reports, or the executive no longer being a Section 16 reporting officer immediately following the change in control), or the executive officer's removal from such position and responsibilities; (II) our change to the timing associated with long-term incentive awards granted to the executive officer; (III) a reduction by us in the executive officer's (A) base salary or target annual bonus as in effect immediately prior to such reduction, or (B) annual grant date fair value of any long-term incentive awards held by the executive officer relative to the highest fair value award granted to the executive during the three-year period prior to a change in control; (IV) a material reduction by us in the kind or aggregate level of employee benefits to which the executive officer is entitled immediately prior to such reduction with the result that the executive officer's overall benefits package is significantly reduced; (V) the executive officer is requested to relocate (except for office relocations that would not increase the executive officer's one way commute by more than 35 miles); or (VI) our failure to obtain the assumption of the employment agreement by the acquiror in the change in control transaction.

For purposes of the Named Executive Officer employment agreements, "change in control" generally means one or more of the following events (i) the acquisition of more than 50% of our combined voting power other than by Alnylam or Ionis (formerly Isis Pharmaceuticals, Inc.) (although this exception does not apply to Mr. Hagan's employment agreement); (ii) a consummation of a merger, consolidation or similar transaction in which our stockholders cease to own outstanding voting securities representing more than 50% of the voting power of the parent or the surviving entity immediately following the merger; or (iii) a consummated sale, lease, exclusive license or other disposition of all or substantially all of our consolidated assets (other than to an entity of which more than 50% of the voting power is owned immediately following such disposition by our stockholders).

Equity Compensation Plans and Other Benefits Plans

2009 Equity Incentive Plan.

Our Board of Directors adopted and our stockholders approved the 2009 Plan in January 2009 for eligible employees, directors and consultants. The terms of the stock option agreements, including vesting requirements, were determined by our Board of Directors, subject to the provisions of the 2009 Plan. Options granted under the 2009 Plan generally vest over four years and are exercisable after they have been granted and up to ten years from the date of grant. The exercise price of the incentive stock options must equal at least 100% of the fair market value of our common stock on the date of grant. Following our initial public offering in October 2012, no additional awards have been or will be granted under the 2009 Plan, and all awards granted under the 2009 Plan that are repurchased, forfeited, expire or are cancelled become available for grant under the 2012 Plan in

accordance with its terms. However, all stock options granted under the 2009 Plan prior to our initial public offering continue to be governed by the terms of the 2009 Plan.

2012 Equity Incentive Plan.

The 2012 Plan, which became effective in connection with our initial public offering in October 2012, provides for the grant of incentive stock options, or ISOs, within the meaning of Section 422 of the Code, nonstatutory stock options, or NSOs, stock appreciation rights, restricted stock awards, restricted stock unit awards, performance-based stock awards, and other forms of equity compensation, or collectively, stock awards. Additionally, the 2012 Plan provides for the grant of performance cash awards. ISOs may be granted only to employees, subject to certain limitations. All other awards may be granted to employees, including officers, and to non-employee directors and consultants.

Our Board of Directors, or a duly authorized committee thereof, has the authority to administer the 2012 Plan. Our Board of Directors has delegated its authority to administer the 2012 Plan to our Compensation Committee under the terms of our Compensation Committee's charter. Our Board of Directors may also delegate certain authority to one or more of our officers. Our Board of Directors or its authorized committee is referred to herein as the plan administrator.

Initially, the aggregate number of shares of our common stock that may be issued pursuant to stock awards under the 2012 Plan was the sum of (i) 1,500,000 shares, plus (ii) the 731,781 shares reserved for issuance under our 2009 Plan at the time our 2012 Plan became effective, plus (iii) any shares subject to stock options or other stock awards granted under our 2009 Plan that would have otherwise returned to our 2009 Plan (such as upon the expiration or termination of a stock award prior to vesting). Additionally, the number of shares of our common stock reserved for issuance under our 2012 Plan automatically increases on January 1 of each calendar year, beginning on January 1, 2013 and continuing through and including January 1, 2022, by 4% of the total number of shares of our capital stock outstanding on December 31 of the preceding calendar year, or a lesser number of shares determined by our Board of Directors. The maximum number of shares that may be issued upon the exercise of ISOs under our 2012 Plan is 3,000,000 shares. As of December 31, 2017, there were 649,590 shares available for future grants under the 2012 Plan. On January 1, 2018, pursuant to the terms of the 2012 Plan, the number of shares available for issuance under the 2012 Plan automatically increased by 4,158,205 shares.

Stock options are generally granted with an exercise price equal to the fair market value of our common stock on the date of grant, vest at the rate specified by the plan administrator (often over a four-year period) and may have a term up to a maximum of 10 years. The exercise price for an ISO or NSO generally cannot be less than 100% of the fair market value of our common stock on the date of grant. Unless the terms of an optionee's stock option agreement provides otherwise, if an optionee's service relationship with us, or any of our affiliates, ceases for any reason other than disability, death or cause, the optionee may generally exercise any vested options for a period of three months following the cessation of service. The option term may be extended in the event that exercise of the option following such a termination of service is prohibited by applicable securities laws or our insider trading policy. If an optionee's service relationship with us, or any of our affiliates, ceases due to disability or death, or an optionee dies within a certain period following cessation of service, the optionee or a beneficiary may generally exercise any vested options for a period of 12 months in the event of disability and 18 months in the event of death. In the event of a termination for cause, options generally terminate immediately upon the termination of the individual. In no event may an option be exercised beyond the expiration of its term.

Unless the plan administrator provides otherwise, options generally are not transferable except by will, the laws of descent and distribution, or pursuant to a domestic relations order. An optionee may designate a beneficiary, however, who may exercise the option following the optionee's death.

Corporate transactions. In the event of certain specified significant corporate transactions, the plan administrator has the discretion to take any of the following actions with respect to stock awards:

- arrange for the assumption, continuation or substitution of a stock award by a surviving or acquiring entity or parent company;
- arrange for the assignment of any reacquisition or repurchase rights held by us to the surviving or acquiring entity or parent company;
- accelerate the vesting of the stock award and provide for its termination prior to the effective time of the corporate transaction;
- arrange for the lapse of any reacquisition or repurchase right held by us;
- cancel or arrange for the cancellation of the stock award in exchange for such cash consideration, if any, as our Board of Directors may deem appropriate; or
- make a payment equal to the excess of (a) the value of the property the participant would have received upon exercise of the stock award over (b) the exercise price otherwise payable in connection with the stock award.

Under the 2012 Plan, a corporate transaction is generally the consummation of (i) a sale or other disposition of all or substantially all of our consolidated assets, (ii) a sale or other disposition of at least 90% of our outstanding securities, (iii) a merger, consolidation or similar transaction following which we are not the surviving corporation, or (iv) a merger, consolidation or similar transaction following which we are the surviving corporation but the shares of our common stock outstanding immediately prior to such transaction are converted or exchanged into other property by virtue of the transaction.

Change in control. The plan administrator may provide, in an individual award agreement or in any other written agreement between a participant and us, that the stock award will be subject to additional acceleration of vesting and exercisability in the event of a change in control. For example, a stock award may provide for accelerated vesting upon the participant's termination without cause or resignation for good reason in connection with a change in control. In the absence of such a provision, no such acceleration of the stock award will occur. Under the 2012 Plan, a change in control is generally (i) the acquisition by a person or entity of more than 50% of our combined voting power other than by merger, consolidation or similar transaction; (ii) a consummated merger, consolidation or similar transaction immediately after which our stockholders cease to own more than 50% of the combined voting power of the surviving entity; (iii) a consummated sale, lease or exclusive license or other disposition of all or substantially all of our consolidated assets; or (iv) individuals who were members of the Board of Directors on the date the 2012 Plan was adopted (the "Incumbent Board") cease to constitute a majority of the Board of Directors, provided that if the appointment, election or nomination of any new Board member was approved by a majority of the members of the Incumbent Board then still in office, such new member will be considered to be a member of the Incumbent Board.

2015 Inducement Plan.

The 2015 Inducement Plan, which was adopted by our Board of Directors in July of 2015, provides for the grant of NSOs, which may be granted only to persons as a material inducement to their commencement of employment with us, pursuant to Rule 5635(c)(4) of the NASDAQ Listing Rules.

Our Board of Directors, or a duly authorized committee thereof, has the authority to administer the 2015 Inducement Plan. Our Board of Directors has delegated its authority to administer the 2015 Inducement Plan to our Compensation Committee under the terms of our Compensation Committee's charter. Grants under the 2015 Inducement Plan must be approved by the Compensation Committee (comprised of independent directors) or a majority of our independent directors (as defined in Rule 5605(a)(2) of the NASDAQ Listing Rules) in order to comply with the exemption from the stockholder approval requirement for "inducement grants" provided under Rule 5635(c)(4) of the NASDAQ Listing Rules.

Initially, the aggregate number of shares of our common stock that may be issued pursuant to NSOs under the 2015 Inducement Plan was 1,000,000 shares. As of December 31, 2017, there were 41,948 shares available for future grants under the 2015 Inducement Plan. The terms of Inducement Plan and NSOs granted thereunder are generally the same as the terms of our 2012 Plan as it relates to NSOs granted under our 2012 Plan.

2012 Employee Stock Purchase Plan.

Additional long-term equity incentives are provided through the 2012 Employee Stock Purchase Plan (the “ESPP”), which became effective in connection with our initial public offering in October 2012. The ESPP is intended to qualify as an “employee stock purchase plan” within the meaning of Section 423 of the Code. Our Board of Directors has delegated its authority to administer the ESPP to our Compensation Committee. Under the ESPP, generally all of our regular employees (including our Named Executive Officers during their employment with us) may participate and may contribute, normally through payroll deductions, up to 15% of their earnings for the purchase of our common stock. The ESPP is implemented through a series of offerings of purchase rights to eligible employees. Under the ESPP, we may specify offerings with a duration of not more than six months, and may specify shorter purchase periods within each offering. Each offering will have one or more purchase dates on which our common stock will be purchased for employees participating in the offering. Unless otherwise determined by our Compensation Committee, shares are purchased for accounts of employees participating in the ESPP at a price per share equal to the lower of (a) 85% of the fair market value of our common stock on the first date of an offering or (b) 85% of the fair market value of our common stock on the date of purchase. As of December 31, 2017, there were 1,675,110 shares available for future issuance under the ESPP. On January 1, 2018, pursuant to the terms of the ESPP, the number of shares available for issuance under the ESPP automatically increased by 500,000 shares.

401(k) Plan.

All of our full-time employees in the United States, including our Named Executive Officers, are eligible to participate in our 401(k) plan, which is a retirement savings defined contribution plan established in accordance with Section 401(a) of the Code. Pursuant to our 401(k) plan, employees may elect to defer their eligible compensation into the plan on a pre-tax basis, up to the statutorily prescribed annual limit of \$18,000 in 2017 (additional salary deferrals not to exceed \$6,000 are available to those employees 50 years of age or older) and to have the amount of this reduction contributed to our 401(k) plan. In 2017, we provided a \$0.25 match for every dollar our employees elect to defer up to 6% of their eligible compensation. In 2018, we will provide a \$0.50 match for every dollar our employees elect to defer up to 6% of their eligible compensation. In general, eligible compensation for purposes of the 401(k) plan includes an employee’s wages, salaries, fees for professional services and other amounts received for personal services actually rendered in the course of employment with us to the extent the amounts are includible in gross income, and subject to certain adjustments and exclusions required under the Code. The 401(k) plan currently does not offer the ability to invest in our securities.

Option Exercises and Stock Vested During 2017⁽¹⁾

Name	Option Awards		Stock Awards	
	Number of Shares Acquired on Exercise (#)	Value Realized on Exercise (\$)	Number of Shares Acquired on Vesting (#)	Value Realized on Vesting (\$)
Joseph P. Hagan	—	—	—	—
Timothy Wright, M.D.	—	—	—	—
Mark Deeg, M.D.	—	—	—	—
Daniel Chevillard	—	—	—	—
Paul C. Grint	—	—	—	—

(1) No options were exercised by our NEOs and no stock awards held by our NEOs vested during 2017.

Potential Payments Upon Termination or Change in Control

Mr. Hagan, Dr. Wright, Dr. Deeg and Mr. Chevallard are each eligible to receive severance and change in control benefits under the terms of their employment agreements, each as described above under "Employment Agreements with Named Executive Officers." Additionally, stock options granted to Mr. Hagan, Dr. Wright, Dr. Deeg and Mr. Chevallard are subject to the change in control provisions set forth in the 2012 Plan as further described above under "Equity Compensation Plans and Other Benefit Plans—2012 Equity Incentive Plan."

The following tables set forth the potential severance benefits payable to the NEOs in the event of a termination prior to or following a change in control, assuming such event occurred on December 31, 2017:

Potential Payment Upon Termination Table*

	Salary ⁽¹⁾	Bonus ⁽²⁾	Accrued Compensation ⁽³⁾	Option Awards ⁽⁴⁾	Medical ⁽⁵⁾	Total
Joseph P. Hagan	\$500,000	—	—	0	\$ 64,792	\$564,792
Timothy Wright, M.D.	\$453,366	—	\$ 13,945	0	\$ 49,967	\$517,278
Mark Deeg, M.D.	\$360,000	—	\$ 1,038	0	\$ 52,327	\$413,365
Daniel Chevallard	\$300,000	—	\$ 25,579	0	\$ 52,327	\$377,906
Paul C. Grint ⁽⁶⁾	\$545,900	—	\$ 41,992	0	\$ 46,967	\$634,859

* Reflects a termination without cause or due to a constructive termination, or deemed termination, prior to a change in control.

(1) Based on salary as of December 31, 2017.

(2) Based on bonus targets established by the Board of Directors for 2017.

(3) Accrued compensation is comprised of vacation pay earned and unpaid as of December 31, 2017.

(4) The amounts in this column represent the intrinsic value of "in-the-money" unvested options as of December 31, 2017 that would vest in accordance with the executive officer's employment agreement. Values were derived using the closing price of the Company's common stock on December 31, 2017 of \$1.04.

(5) Medical is comprised primarily of health insurance premiums for the period specified in each executive officer's employment agreement.

(6) Dr. Grint resigned from the Company on May 4, 2017. The compensation in the table are the actual values of the compensation paid to Dr. Grint. Dr. Grint's time to exercise his options was also extended from three months to one year. The value of the Option Awards includes the incremental value to his vested options caused by extending the time to exercise.

Potential Payment Upon Change-in Control Table*

	Salary ⁽¹⁾	Bonus ⁽²⁾	Accrued Compensation ⁽³⁾	Option Awards ⁽⁴⁾	Medical ⁽⁵⁾	Total
Joseph P. Hagan	\$500,000	\$250,000	—	0	\$ 64,792	\$814,792
Timothy Wright, M.D.	\$453,366	\$181,346	\$ 13,945	0	\$ 49,967	\$698,625
Mark Deeg, M.D.	\$360,000	\$144,000	\$ 1,038	0	\$ 52,327	\$557,365
Daniel Chevallard	\$300,000	\$120,000	\$ 25,579	0	\$ 52,327	\$497,906
Paul C. Grint	\$545,900	\$272,950	\$ 41,992	0	\$ 46,967	\$907,809

* Reflects benefits to be provided upon a termination without cause or due to a constructive termination, within a specified period prior to or following to a change in control.

(1) Based on salary as of December 31, 2017.

(2) Based on bonus targets established by the Board of Directors for 2017.

(3) Accrued compensation is comprised of vacation pay earned and unpaid as of December 31, 2017.

- (4) The amounts in this column represent the intrinsic value of “in-the-money” unvested options as of December 31, 2017 that would vest in accordance with the executive officer’s employment agreement. Values were derived using the closing price of the Company’s common stock on December 31, 2017 of \$1.04.
- (5) Medical is comprised primarily of health insurance premiums for the period specified in each executive officer’s employment agreement.

Equity Compensation Plan Information

The following table provides information as of December 31, 2017, with respect to shares of our common stock that may be issued under our existing equity compensation plans:

<u>Plan Category</u>	<u>(a)</u> Number of securities to be issued upon exercise of outstanding options, awards, warrant and rights	<u>(b)</u> Weighted-average exercise price of outstanding options, awards, warrant and rights	<u>(c)</u> Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
Equity compensation plans approved by stockholders:			
2009 Equity Incentive Plan	299,088(1)	\$ 1.10	—
2012 Equity Incentive Plan	9,391,383(1)	\$ 4.45	649,590
2012 Employee Stock Purchase Plan	—	\$ —	1,675,110
Equity compensation plans not approved by stockholders:			
2015 Inducement Plan	958,052(1)	\$ 5.37	41,948

- (1) All shares issuable upon exercise of options.

DIRECTOR COMPENSATION

The following table shows certain information with respect to the compensation of all non-employee directors of the Company for the fiscal year ended December 31, 2017:

<u>Name</u>	<u>Fees Earned or Paid in Cash (\$)</u>	<u>Option Awards (\$)(1)</u>	<u>Stock Awards (\$)(2)</u>	<u>Total (\$)</u>
David Baltimore, Ph.D.	54,000	30,921(3)	54,000	138,921
Mark Foletta	64,000	30,921(3)	64,000	158,921
Stelios Papadopoulos, Ph.D.	83,495	30,921(3)	86,000	200,416
William H. Rastetter, Ph.D.	62,000	30,921(3)	62,000	154,921
Hugh Rosen, M.D., Ph.D.	50,000	30,921(3)	50,000	130,921
Douglas E. Williams, Ph.D.(4)	16,703	—	—	16,703
Pascale Witz	31,462	66,019(5)	54,000	151,481

- (1) Amounts listed represent the aggregate grant date fair value amount computed as of the grant date of each option awarded during 2017 in accordance with ASC 718. Assumptions used in the calculation of these amounts are included in Note 10 to the Financial Statements in our Annual Report on Form 10-K for the year ended December 31, 2017. Our directors will only realize compensation to the extent the trading price of our common stock is greater than the exercise price of such stock options. As of December 31, 2017, the aggregate number of shares subject to each non-employee director’s outstanding option awards was as

follows: Dr. Baltimore, 354,120 shares; Mr. Foletta, 149,120 shares; Dr. Papadopoulos, 90,943 shares; Dr. Rastetter, 149,120 shares; Dr. Rosen, 100,952, Dr. Williams, 112,800 shares and Ms. Witz 31,462 shares.

- (2) Represents Restricted Stock Units (RSUs) granted to each of our non-employee directors in lieu of cash compensation during 2018. The total RSUs will vest in four equal quarterly installments on the last day of each calendar quarter during 2018, subject to each director's continuous service to us through such vesting dates. The RSUs were calculated based upon a grant price of \$0.89 divided by the total cash compensation which otherwise would have been paid to each such director during 2018 for each director's board and committee service.
- (3) Represents the annual option grant to purchase shares of our common stock granted to each of our non-employee directors serving on June 1, 2017 under our non-employee director compensation policy, as further described below.
- (4) Dr. Williams did not stand for re-election in 2017 and therefore received compensation until June 1, 2017, his last day of board service.
- (5) Represents an initial option grant to purchase shares of our common stock granted to Ms. Witz upon her election to our Board of Directors in June 2017 under our non-employee director compensation policy, as further described below.

Directors who are also employees do not receive cash or equity compensation for service on our Board of Directors in addition to the compensation payable for their service as our employees. We have a non-employee director compensation policy, or our director compensation policy, that became effective following our initial public offering. Under our director compensation policy, our Compensation Committee determines individual non-employee members of our Board of Directors who will be eligible to receive compensation and who we refer to as our Eligible Directors. All of our non-employee directors were Eligible Directors for 2017 compensation under our director compensation policy. Pursuant to our director compensation policy in effect in 2017, we provide cash compensation in the form of an annual retainer of \$40,000 to each of our Eligible Directors and \$70,000 to our Chairman of the Board. We also pay an additional annual retainer of \$20,000 to the chairman of our Audit Committee, \$10,000 to other independent Eligible Directors who serve on our Audit Committee, \$12,000 to the chairman of our Compensation Committee, \$6,000 to other independent Eligible Directors who serve on our Compensation Committee, \$8,000 to the chairman of our Nominating and Corporate Governance Committee and \$4,000 to other independent Eligible Directors who serve on our Nominating and Corporate Governance Committee. We have reimbursed and will continue to reimburse our non-employee directors for travel, lodging and other reasonable expenses incurred in attending meetings of our Board of Directors and committees of our Board of Directors.

Pursuant to our director compensation policy in effect in 2017, each Eligible Director who was first elected to our Board of Directors was granted an option to purchase shares of the Company's common stock on the date of his or her initial election to our Board of Directors valued at \$300,000 as determined by the Black Scholes method on the date of grant. In addition, on the date of each annual meeting of the Company's stockholders, each Eligible Director was eligible to receive an option to purchase shares of common stock valued at \$150,000 as determined by the Black Scholes method on the date of grant. Such initial and annual options had an exercise price per share equal to the fair market value of the common stock on the date of grant.

Each initial option granted to such Eligible Directors described above will vest and become exercisable with respect to one-third of the shares subject to the option on the first anniversary of the date of grant and the balance of the shares will vest and become exercisable in a series of 24 equal monthly installments thereafter, such that the option is fully vested on the third anniversary of the date of grant, subject to the Eligible Director continuing to provide services to us through such dates. Each annual option granted to such Eligible Directors described above will vest and become exercisable in 12 equal monthly installments such that the option will be fully vested on the first anniversary of the date of grant, or as of the date of the next annual meeting of the Company's stockholders, whichever occurs first and subject to the Eligible Director continuing to provide services to us through such dates. The term of each option granted to an Eligible Director is 10 years.

The options are granted under our 2012 Plan, the terms of which are described in more detail above under “Equity Compensation Plans and Other Benefit Plans—2012 Equity Incentive Plan.”

During 2017, the Compensation Committee engaged Aon/Radford to provide a competitive assessment of the Company’s director compensation program concerning the length of time provided to exercise options once a director no longer serves on the board compared to directors at selected publicly traded peer companies. Following an analysis of the peer companies, in December 2016 our Board of Directors revised the director compensation policy to provide that any new option granted to a director would be exercisable up to one year following the date such director’s ceases to provide services to us. This revision will apply to stock option grants made to a director commencing in 2017. This revision does not apply to stock option grants made prior to the adoption of the revised policy which will continue to be exercisable only for the three months following the date a director ceases to provide services to us, pursuant to the general terms of the 2012 Plan.

In March 2017, the Board of Directors, upon the recommendation of the Compensation Committee, approved a change to the initial option grants and annual option grants that would be made to each Eligible Director in 2017 under our director compensation policy, such that a new director would receive an initial grant of 60,000 shares and existing directors would receive annual grants of 30,000 shares of our common stock, each with a grant price equal to the closing price of our stock on the date of grant. In December of 2017, the Board of Directors, upon the recommendation of the Compensation Committee, approved a further change to the initial option grants and annual stock option grants that would be made to each Eligible Director in 2018 under our director compensation policy, such that a new director would receive an initial grant of 110,000 and existing directors would receive annual grants of 55,000. In addition, due to the Company’s cash position at year end 2017, the Board of Directors approved an award of Restricted Stock Units (RSUs) in lieu of cash payments to be made to each eligible director during 2018. The RSUs will vest in four quarterly installments at the end of each calendar quarter during 2018, subject to such eligible director’s continuous service to us through each such vesting date. The RSUs were calculated using the total cash compensation expected to be paid to each eligible director during the 2018 calendar year divided by the price of our stock on the date of grant.

PROPOSAL 4

RATIFICATION OF SELECTION OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Audit Committee has selected Ernst & Young LLP as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2018 and has further directed that management submit the selection of independent registered public accounting firm for ratification by the stockholders at the annual meeting. Ernst & Young has audited the Company's financial statements since its incorporation in 2009. Representatives of Ernst & Young are expected to be present at the annual meeting. They will have an opportunity to make a statement if they so desire and will be available to respond to appropriate questions.

Neither the Company's Bylaws nor other governing documents or law require stockholder ratification of the selection of Ernst & Young as the Company's independent registered public accounting firm. However, the Audit Committee is submitting the selection of Ernst & Young to the stockholders for ratification as a matter of good corporate practice. If the stockholders fail to ratify the selection, the Audit Committee will reconsider whether or not to retain that firm. Even if the selection is ratified, the Audit Committee in its discretion may direct the appointment of different independent auditors at any time during the year if they determine that such a change would be in the best interests of the Company and its stockholders.

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 Ernst & Young. Abstentions will be counted toward the tabulation of votes on proposals presented to the stockholders and will have the same effect as negative votes. Broker non-votes (if any) are counted towards a quorum, but are not counted for any purpose in determining whether this matter has been approved.

PRINCIPAL ACCOUNTANT FEES AND SERVICES

The following table represents aggregate fees billed to the Company for the fiscal years ended December 31, 2017 and December 31, 2016, by Ernst & Young LLP, the Company's principal accountant. All fees described below were pre-approved by the Audit Committee.

	Fiscal Year Ended	
	2017	2016
	(in thousands)	
Audit Fees(1)	\$664	\$407
Audit-related Fees	—	—
Tax Fees(2)	—	—
All Other Fees	—	—
Total Fees	\$664	\$407

- (1) Audit fees consist of fees billed for professional services by Ernst & Young for audit and quarterly review of our financial statements and review of our registration statements on Form S-3 and Form S-8, and related services that are normally provided in connection with statutory and regulatory filings or engagements.
- (2) Tax fees consist of fees billed for professional services by Ernst & Young for analysis of the Company's research credit.

All fees described above were pre-approved by the Audit Committee.

In connection with the audit of each of the 2017 and 2016 financial statements, the Company entered into an engagement agreement with Ernst & Young which sets forth the terms by which Ernst & Young will perform audit services for the Company. Such agreements are subject to alternative dispute resolution procedures.

During the fiscal years ended December 31, 2017 and December 31, 2016, none of the total hours expended on the Company's financial audit by Ernst & Young were provided by persons other than Ernst & Young full-time permanent employees.

PRE-APPROVAL POLICIES AND PROCEDURES

The Audit Committee must pre-approve the audit and non-audit services rendered by the Company's independent registered public accounting firm.

THE BOARD OF DIRECTORS RECOMMENDS

A VOTE FOR PROPOSAL 4

EXECUTIVE OFFICERS

The following table sets forth our current executive officers, their ages, and the positions held by each such person with the Company:

<u>Name</u>	<u>Age</u>	<u>Position Held With the Company</u>
Joseph “Jay” Hagan	49	President and Chief Executive Officer
Timothy Wright, M.D.	62	Chief Research and Development Officer
Mark Deeg, M.D., Ph.D.	58	Chief Medical Officer
Daniel R. Chevallard	38	Chief Financial Officer

Mr. Hagan’s biographical information is set forth above under Proposal 1.

Timothy Wright, M.D., has served as our Chief Research & Development Officer since October 2016. From February 2015 through October 2016, he served as the Executive Vice President of Translational Sciences for the California Institute for Biomedical Research (Calibr), a not-for-profit translational research institute. Prior to Calibr, Dr. Wright held a variety of positions with increasing levels of responsibility over an 11-year period at Novartis Pharma most recently as Global Head of Development. Prior to Novartis, Dr. Wright spent three years at Pfizer holding leadership positions in Discovery and Clinical Sciences, leading translational research efforts and clinical trials for numerous programs across several therapeutic areas. Dr. Wright was trained as a physician-scientist at Johns Hopkins and had an accomplished academic career at both Johns Hopkins and the University of Pittsburgh before moving to pharma. He also serves as a key scientific advisor to several organizations, including the Bill & Melinda Gates Foundation.

Mark Deeg, M.D., Ph.D., has served as our Chief Medical Officer since June 2017. Dr. Deeg joined us in April 2017 as our Vice President of Translational Medicine. Prior to joining Regulus, Dr. Deeg was the Chief Medical Officer of The Chorus Group, an autonomous early drug development division of Eli Lilly, focused on innovative approaches to drive rapid and efficient Proof-of-Concept decisions. Before joining Eli Lilly, Dr. Deeg served on the faculty at Indiana University for 11 years conducting translational research. Dr. Deeg received his M.D. and PhD (in Pharmacology) at the University of Minnesota. After his residency in Internal Medicine at The University Hospitals of Cleveland and postdoc in structural biochemistry at Case Western Reserve University, Mark completed subspecialty training in Endocrinology at the University of Washington.

Daniel R. Chevallard has served as our Chief Financial Officer and principal financial officer since May 2017. Mr. Chevallard joined us in December 2012 as Vice President, Accounting and Financial Reporting and served as Vice President, Finance from May 2013 to April 2017. Prior to joining us, Mr. Chevallard held various senior roles in corporate finance, accounting and financial reporting including Controller and Senior Director, Finance of Prometheus Laboratories Inc. (acquired by Nestle’ Health Science in July 2011). Prior to joining Prometheus, Mr. Chevallard spent approximately five years in public accounting at Ernst & Young, LLP in their assurance services practice. He received his Bachelor of Accountancy from the University of San Diego and is a Certified Public Accountant in the state of California.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information regarding the ownership of the Company’s common stock as of March 31, 2018 by: (i) each of our directors; (ii) each of our Named Executive Officers as defined above under the heading “Executive Compensation”; (iii) each person known by us to beneficially own more than 5% of our common stock and (iv) all of our current executive officers and directors as a group.

Beneficial ownership is determined in accordance with the rules of the SEC and includes voting and investment power with respect to the securities. This table is based upon information supplied by officers, directors and principal stockholders and Schedules 13D and 13G filed with the SEC. Except as indicated by footnote, and subject to applicable community property laws, we believe the persons named in the table have sole voting and investment power with respect to all shares of common stock shown as beneficially owned by them.

Percentage of beneficial ownership is based on 104,319,552 shares of common stock outstanding as of March 31, 2018. The number of shares of common stock used to calculate the percentage ownership of each listed person includes the shares of common stock underlying options held by such persons that are exercisable within 60 days following March 31, 2018. Unless otherwise indicated, the address for the persons and entities listed in the table below is c/o Regulus Therapeutics Inc., 10614 Science Center Drive, San Diego, CA 92121.

Beneficial Owner	Beneficial Ownership	
	Number of Shares	Percent of Total
Greater than 5% Stockholders		
FMR LLC ⁽¹⁾ 245 Summer Street Boston, Massachusetts 02210	15,593,272	14.9%
New Enterprise Associates ⁽²⁾ 1954 Greenspring Dr., Suite 600 Timonium, Maryland 21093	10,989,010	10.5%
BVF Partners, LP ⁽³⁾ 1 Sansome Street, 30 th Floor San Francisco, California 94104	6,140,322	5.9%
Aventisub LLC ⁽⁴⁾ c/o Sanofi 54, rue La Boétie 75414 Paris—France	8,706,526	8.3%
Named Executive Officers and Directors		
David Baltimore, Ph.D. ⁽⁵⁾	381,469	*
Kathryn J. Collier	0	*
Daniel R. Chevillard ⁽⁶⁾	311,105	*
Mark Deeg, M.D., Ph.D. ⁽⁷⁾	45,312	*
Mark G. Foletta ⁽⁸⁾	192,087	*
Paul C. Grint, M.D. ⁽⁹⁾	681,339	*
Joseph P. Hagan ⁽¹⁰⁾	907,661	*
Stelios Papadopoulos, Ph.D. ⁽¹¹⁾	1,866,947	1.8%
William H. Rastetter, Ph.D. ⁽¹²⁾	805,688	*
Hugh Rosen, M.D., Ph.D. ⁽¹³⁾	100,918	*
Douglas E. Williams, M.D., Ph.D. ⁽¹⁴⁾	112,800	*
Timothy Wright, M.D. ⁽¹⁵⁾	723,237	*
Pascale Witz, MBA, MSc	30,336	*
All current executive officers and directors as a group (11 persons) ⁽¹⁶⁾	6,158,899	5.8%

* Less than one percent.

(1) Consists of shares beneficially owned, or that may be deemed to be beneficially owned, by FMR LLC, certain of its subsidiaries and affiliates, and other companies (collectively, the “FMR Reporters”). Does not reflect securities, if any, beneficially owned by certain other companies whose beneficial ownership of securities is disaggregated from that of the FMR Reporters in accordance with Securities and Exchange Commission Release No. 34-39538 (January 12, 1998). Abigail P. Johnson is a Director, the Vice Chairman, the Chief Executive Officer and the President of FMR LLC. Members of the Johnson family, including Abigail P. Johnson, are the predominant owners, directly or through trusts, of Series B voting common shares of FMR LLC, representing 49% of the voting power of FMR LLC. The Johnson family group and all other Series B shareholders have entered into a shareholders’ voting agreement under which all Series B voting common shares will be voted in accordance with the majority vote of Series B voting common shares. Accordingly, through their ownership of voting common shares and the execution of the shareholders’ voting agreement, members of the Johnson family may be deemed, under the Investment

Company Act of 1940, to form a controlling group with respect to FMR LLC. Neither FMR LLC nor Abigail P. Johnson has the sole power to vote or direct the voting of the shares owned directly by the various investment companies registered under the Investment Company Act (“Fidelity Funds”) advised by Fidelity Management & Research Company (“FMR Co”), a wholly owned subsidiary of FMR LLC, which power resides with the Fidelity Funds’ Boards of Trustees. Fidelity Management & Research Company carries out the voting of the shares under written guidelines established by the Fidelity Funds’ Boards of Trustees.

- (2) Consists of shares beneficially owned, or that may be deemed to be beneficially owned by, (a) Growth Equity Opportunities Fund V, LLC (“GEO”); (b) New Enterprise Associates 16, L.P. (“NEA 16”), which is the sole member of GEO, NEA Partners 16, L.P. (“NEA Partners 16”), which is the sole general partner of NEA 16; and NEA 16 GP, LLC (“NEA 16 LLC” and, together with NEA Partners 16, the “Control Entities”), which is the sole general partner of NEA Partners 16; and (c) Peter J. Barris (“Barris”), Forest Baskett (“Baskett”), Anthony A. Florence, Jr. (“Florence”), Mohamad H. Makhzoumi (“Makhzoumi”), Joshua Makower (“Makower”), David M. Mott (“Mott”), Chetan Puttagunta (“Puttagunta”), Jon M. Sakoda (“Sakoda”), Scott D. Sandell (“Sandell”), Peter W. Sonsini (“Sonsini”) and Ravi Viswanathan (“Viswanathan”) (together, the “Managers”). The Managers are the managers of NEA 16 LLC. The persons named herein are referred to individually herein as a “Reporting Person” and collectively as the “Reporting Persons.” GEO is the record owner of the GEO Shares. As the sole member of GEO, NEA 16 may be deemed to own beneficially the GEO Shares. As the general partner of NEA 16, NEA Partners 16 may be deemed to own beneficially the GEO Shares. As the sole general partner of NEA Partners 16, NEA 16 LLC may be deemed to own beneficially the GEO Shares. As members of NEA 16 LLC, each of the Managers may be deemed to own beneficially the GEO Shares. Each Reporting Person disclaims beneficial ownership of the GEO Shares other than those shares which such person owns of record.
- (3) Consists of shares beneficially owned, or that may be deemed to be beneficially owned, by BVF Inc., as the general partner of BVF, BVF2, and Trading Fund OS. BVF Partners, L.P., as the general partner of BVF, BVF2, the investment manager of Trading Fund OS, and the sole member of Partners OS, may be deemed to beneficially own the 13,974,249 shares of Common Stock beneficially owned in the aggregate by BVF, BVF2, Trading Fund OS, and certain BVF Partners, L.P. managed accounts (the “Partners Managed Accounts”), including 2,865,734 shares of Common Stock held in the Partners Managed Accounts. Mr. Mark M. Lampert, as a director and officer of BVF Inc., may be deemed to beneficially own the 13,974,249 Common Stock beneficially owned by BVF Inc. The foregoing should not be construed in and of itself as an admission by any Reporting Person as to beneficial ownership of any Common Stock owned by another Reporting Person. Partners OS disclaims beneficial ownership of the Common Stock beneficially owned by Trading Fund OS. Each of Partners, BVF Inc. and Mr. Lampert disclaims beneficial ownership of the Common Stock beneficially owned by BVF, BVF2, Trading Fund OS, and the Partners Managed Accounts, and the filing of this statement shall not be construed as an admission that any such person or entity is the beneficial owner of any such securities.
- (4) Aventisub LLC is a subsidiary of Sanofi. Sanofi has the ability to exercise voting and dispositive power over the shares held by Aventisub LLC.
- (5) Includes 351,133 shares that Dr. Baltimore has the right to acquire from us within 60 days of March 31, 2018 pursuant to the exercise of stock options.
- (6) Includes 249,585 shares that Mr. Chevillard has the right to acquire from us within 60 days of March 31, 2018 pursuant to the exercise of stock options.
- (7) Includes 45,312 shares that Dr. Deeg has the right to acquire from us within 60 days of March 31, 2018 pursuant to the exercise of stock options
- (8) Includes 146,133 shares that Mr. Foletta has the right to acquire from us within 60 days of March 31, 2018 pursuant to the exercise of stock options.
- (9) Dr. Grint’s address is c/o AmpliPhi Biosciences Corporation, 3579 Valley Centre Drive, Suite 100, San Diego, California 92130. Consists of 681,339 shares that Dr. Grint has the right to acquire from us within 60 days of March 31, 2018.
- (10) Includes 656,364 shares that Mr. Hagan has the right to acquire from us within 60 days of March 31, 2018.

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- (11) Includes 117,956 shares that Dr. Papadopoulos has the right to acquire from us within 60 days of March 31, 2018 pursuant to the exercise of stock options.
 - (12) Includes 146,133 shares that Dr. Rastetter has the right to acquire from us within 60 days of March 31, 2018 pursuant to the exercise of stock options.
 - (13) Includes 72,830 shares that Dr. Rosen has the right to acquire from us within 60 days of March 31, 2018.
 - (14) Includes 112,800 shares that Dr. Williams has the right to acquire from us within 60 days of March 31, 2018 pursuant to the exercise of stock options. Dr. Williams' term ended on June 2, 2017 and his options will cancel on June 1, 2018 unless exercised.
 - (15) Includes 428,512 shares that Dr. Wright has the right to acquire from us within 60 days of March 31, 2018.
 - (16) Includes the shares described in notes (5) through (8) and (10) through (15) and shares held by Pascale Witz.

TRANSACTIONS WITH RELATED PERSONS

We have adopted a written related-person transactions policy that sets forth our policies and procedures regarding the identification, review, consideration, approval and oversight of “related-person transactions.” For purposes of our policy only, a “related-person transaction” is a past, present or future transaction, arrangement or relationship (or any series of similar transactions, arrangements or relationships) in which we and any “related person” are participants involving an amount that exceeds \$120,000.

Transactions involving compensation for services provided to us by an employee, consultant or director are not considered related-person transactions under this policy. A “related person,” as determined since the beginning of our last fiscal year, is any executive officer, director or a holder of more than five percent of our common stock, including any of their immediate family members and any entity owned or controlled by such persons.

The policy imposes an affirmative duty upon each director and executive officer to identify any transaction involving them, their affiliates or immediate family members that may be considered a related party transaction before such person engages in the transaction. Under the policy, where a transaction has been identified as a related-person transaction, management must present information regarding the proposed related-person transaction to our audit committee (or, where review by our audit committee would be inappropriate, to another independent body of our board of directors) for review. The presentation must include a description of, among other things, the material facts, the direct and indirect interests of the related persons, the benefits of the transaction to us and whether any alternative transactions are available. In considering related-person transactions, our audit committee or other independent body of our board of directors takes into account the relevant available facts and circumstances including, but not limited to:

- the risks, costs and benefits to us of the transaction;
- the impact on a director’s independence in the event the related person is a director, immediate family member of a director or an entity with which a director is affiliated;
- the terms of the transaction;
- the availability of other sources for comparable services or products; and
- the terms available to or from, as the case may be, unrelated third parties or to or from our employees generally.

In the event a director has an interest in the proposed transaction, the director must recuse himself or herself from the deliberations and approval. Our policy requires that, in reviewing a related party transaction, our audit committee must consider, in light of known circumstances, and determine in the good faith exercise of its discretion whether the transaction is in, or is not inconsistent with, the best interests of us and our stockholders.

We describe below transactions and series of similar transactions, since January 1, 2017, with respect to which we were a party, will be a party, or otherwise benefited, in which:

- the amounts involved exceeded or will exceed \$120,000; and
- a director, executive officer, holder of more than 5% of our common stock or any member of their immediate family had or will have a direct or indirect material interest.

We also describe below certain other transactions with our directors, executive officers and stockholders. We believe that the terms obtained or consideration that we paid or received, as applicable, in connection with the transactions described below were comparable to terms available or the amounts that would be paid or received, as applicable, in arm’s-length transactions.

As required under Nasdaq listing standards, a majority of the members of a listed company's Board of Directors must qualify as "independent," as affirmatively determined by the Board of Directors. The Board consults with the Company's counsel to ensure that the Board's determinations are consistent with relevant securities and other laws and regulations regarding the definition of "independent," including those set forth in pertinent listing standards of Nasdaq, as in effect from time to time.

Consistent with these considerations, after review of all relevant identified transactions or relationships between each director, or any of his or her family members, and the Company, its senior management and its independent auditors, the Board has affirmatively determined that the following seven directors are independent directors within the meaning of the applicable Nasdaq listing standards: Dr. Baltimore, Ms. Collier, Mr. Foletta, Dr. Papadopoulos, Dr. Rosen, Dr. Rastetter and Ms. Witz. In making these determinations, the Board found that none of these directors had a material or other disqualifying relationship with the Company.

Alliance and Collaboration Agreements

Sanofi

In February 2014, we amended and restated our 2012 amended and restated license and collaboration agreement with Sanofi, a greater than 5% stockholder of the Company, extending our strategic alliance with Sanofi. Aventisub LLC (formerly Aventis Holdings Inc.) concurrently made a \$10.0 million investment in our common stock at a purchase price of \$7.67 per share, representing the average of the daily volume weighted average price per share of our common stock during the 30 trading days ending on the date immediately preceding the date of the investment. Under the terms of the restated agreement, we have agreed to collaborate with Sanofi to develop and commercialize licensed compounds targeting four *micro* RNA alliance targets initially focused in the field of fibrosis and have granted Sanofi an exclusive license to develop and commercialize products under the alliance. Under the terms of our extended alliance, Sanofi has opt-in rights to our miR-21 preclinical fibrosis program targeting miR-21 for the treatment of Alport Syndrome, our preclinical program targeting miR-21 for oncology indications, and our preclinical programs targeting miR-221/222 for oncology indications, each of which is to be led by us. If Sanofi chooses to exercise its option on any of these programs, Sanofi will reimburse us for a significant portion of our preclinical and clinical development costs and will also pay us an option exercise fee for any such program, provided that \$1.25 million of the \$2.5 million upfront option fee paid to us by Sanofi in connection with the June 2013 option agreement will be creditable against such option exercise fee. We are eligible to receive milestone payments of up to \$101.8 million for proof-of-concept option exercise fees (net of \$1.25 million creditable, as noted above), \$15.0 million for clinical milestones and up to \$300.0 million for regulatory and commercial milestones. In addition, we are entitled to receive royalties based on a percentage of net sales of any products from the miR-21 and miR-221/222 programs which, in the case of sales in the United States, will be in the middle of the 10 to 20% range, and, in the case of sales outside of the United States, will range from the low end to the middle of the 10 to 20% range, depending upon the volume of sales. If we exercise our option to co-promote a product, we will continue to be eligible to receive royalties on net sales of each product in the United States at the same rate, unless we elect to share a portion of Sanofi's profits from sales of such product in the United States in lieu of royalties.

In September 2014, we entered into an agreement with Sanofi-Aventis Deutschland GmbH ("Sanofi Deutschland"), a contract manufacturing subsidiary of Sanofi, for the manufacture of certain drug substance requirements and other services to support our preclinical and clinical activities associated with the RG-012 program. Pursuant to this agreement, we may engage Sanofi Deutschland from time-to-time to manufacture RG-012 drug product on our behalf. To date, we have engaged Sanofi Deutschland to manufacture multiple cGMP batches of RG-012 and to perform stability testing and related activities at a cost of \$1,831,992. These activities were ongoing during 2017.

Indemnification Agreements

We have entered into separate indemnification agreements with our directors and executive officers, in addition to the indemnification provided for in our bylaws. These agreements, among other things, require us to

indemnify our directors and executive officers for certain expenses, including attorneys' fees, judgments, fines and settlement amounts incurred by a director or executive officer in any action or proceeding arising out of his or her services as one of our directors or executive officers or any other company or enterprise to which the person provides services at our request. We believe that these indemnification agreements, together with the provisions in our bylaws, are necessary to attract and retain qualified persons as directors and officers.

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 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 Regulus Therapeutics Inc. stockholders will be "householding" the Company's proxy materials. A single Notice 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 or set of annual meeting materials, please notify your broker or Regulus Therapeutics Inc. Direct your written request to Regulus Therapeutics Inc., Attn: Investor Relations, 10614 Science Center Drive, San Diego, California 92121, or contact our Vice President of Investor Relations at Regulus Therapeutics Inc. by telephone at (858) 202-6300. Stockholders who currently receive multiple Notices at their addresses and would like to request "householding" of their communications should contact their brokers.

OTHER MATTERS

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

By Order of the Board of Directors

A handwritten signature in black ink, appearing to read "Christopher Aker". The signature is fluid and cursive, with a large initial "C" and "A".

Christopher Aker
Vice President, Legal Affairs and Secretary

April 20, 2018

A copy of the Company's Annual Report to the Securities and Exchange Commission on Form 10-K for the fiscal year ended December 31, 2017 is available without charge upon written request to: Corporate Secretary, Regulus Therapeutics Inc., 10614 Science Center Drive, San Diego, California 92121.

REGULUS THERAPEUTICS INC.

2018 Annual Meeting of
Regulus Therapeutics Inc. Stockholders
June 1, 2018 9:00 A.M. PDT

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting:
The Proxy Statement and Form 10-K are available at www.edocumentview.com/RGLS.

▼ IF YOU HAVE NOT VOTED VIA THE INTERNET OR TELEPHONE, FOLD ALONG THE PERFORATION, DETACH AND RETURN THE BOTTOM PORTION IN THE ENCLOSED ENVELOPE. ▼



Proxy – Regulus Therapeutics Inc.

Notice of 2018 Annual Meeting of Stockholders

Proxy Solicited by Board of Directors for Annual Meeting – June 1, 2018

The undersigned hereby appoint(s) Joseph P. Hagan and Christopher Aker and each of them, with power to act without the other and with power of substitution, as proxies and attorneys-in-fact and hereby authorizes them to represent and vote, as provided on the other side, all the shares of Regulus Therapeutics Inc. Common Stock which the undersigned is entitled to vote and, in their discretion, to vote upon such other business as may properly come before the Annual Meeting of Stockholders of the Company to be held June 1, 2018 at the company's offices located at 10614 Science Center Drive, San Diego, CA 92121, with all powers which the undersigned would possess if present at the Meeting.

This proxy, when properly executed, will be voted in the manner directed herein. If no direction is made but the card is signed, this proxy card will be voted **FOR** the election of all nominees listed in Proposal 1, **FOR** Proposal 2, **One Year** for Proposal 3, and **FOR Proposal 4**, and in the discretion of the proxies with respect to such other business as may properly come before the meeting.

Continued and to be signed on reverse side

C Non-Voting Items

Change of Address — Please print your new address below.

Comments — Please print your comments below.

Meeting Attendance

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



IF VOTING BY MAIL, YOU MUST COMPLETE SECTIONS A - C ON BOTH SIDES OF THIS CARD.

