

88 Sidney Street, Cambridge, Massachusetts 02139

# NOTICE OF ANNUAL MEETING OF STOCKHOLDERS TO BE HELD ON TUESDAY, JUNE 13, 2017

#### Dear Stockholder:

You are cordially invited to our Annual Meeting of Stockholders on Tuesday, June 13, 2017, beginning at 9:00 a.m., Eastern Time, at our offices located at 88 Sidney Street, Cambridge, Massachusetts 02139, for the following purposes:

- 1. To elect three Class I directors, each to serve for a three-year term expiring at the 2020 annual meeting of stockholders and until his respective successor is duly elected and qualified;
- 2. To approve an advisory vote on the compensation paid to our named executive officers; and
- 3. To transact such other business as may be properly brought before the meeting or any adjournment or postponement thereof.

Stockholders of record as of the close of business on April 17, 2017 are entitled to vote at the meeting.

Instead of mailing a paper copy of our proxy materials to all of our shareholders, this year we are providing access to our proxy materials over the internet under the U.S. Securities and Exchange Commission's "notice and access" rules. As a result, we are mailing to our shareholders a Notice of Internet Availability of Proxy Materials (the "Notice") instead of a paper copy of this proxy statement and our Annual Report for the fiscal year ended December 31, 2016 (the "2016 Annual Report"). We are mailing the Notice on or about April 24, 2017, and it contains instructions on how to access those documents over the internet. The Notice also contains instructions on how each of our shareholders can receive a paper copy of our proxy materials, including this proxy statement, our 2016 Annual Report, and a form of proxy card or voting instruction card. All shareholders who do not receive the Notice, including shareholders who have previously requested to receive paper copies of proxy materials, will receive a paper copy of the proxy materials by mail unless they have previously requested delivery of proxy materials electronically. We have chosen to employ this distribution process to conserve natural resources and reduce the costs of printing and distributing our proxy materials.

We encourage all stockholders to attend the Annual Meeting in person. Whether or not you plan to attend the Annual Meeting in person, we encourage you to read this Proxy Statement and submit your proxy or voting instructions as soon as possible by using the internet as described in the instructions included on your Notice, by calling the toll-free telephone number included on your Notice, or, if you received a paper copy of the proxy materials, by completing, signing, dating and returning your proxy card or voting instruction form.

Thank you for your ongoing support and continued interest in Agios Pharmaceuticals, Inc.

By Order of the Board of Directors,

David P. Schenkein, M.D.

President and Chief Executive Officer

Cambridge, Massachusetts April 24, 2017 Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting of Stockholders to be Held on June 13, 2017: This Proxy Statement and our 2016 Annual Report to Stockholders are available at <a href="https://www.proxydocs.com/agio">www.proxydocs.com/agio</a>. These documents are also available to any stockholder who wishes to receive a paper copy by calling (866) 648-8133, visiting <a href="https://www.investorelections.com/agio">www.investorelections.com/agio</a> or emailing paper@investorelections.com.

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88 Sidney Street, Cambridge, Massachusetts 02139

#### PROXY STATEMENT FOR THE 2017 ANNUAL MEETING OF STOCKHOLDERS

### TO BE HELD ON TUESDAY, JUNE 13, 2017

#### INFORMATION CONCERNING SOLICITATION AND VOTING

This Proxy Statement contains information about our 2017 annual meeting of stockholders, or the Annual Meeting. The meeting will be held on Tuesday, June 13, 2017, beginning at 9:00 a.m. local time, at our offices located at 88 Sidney Street, Cambridge, Massachusetts 02139. Except where the context otherwise requires, references to "Agios Pharmaceuticals," "Agios," "we," "us," "our" and similar terms refer to Agios Pharmaceuticals, Inc. and its consolidated subsidiaries. References to our website are inactive textual references only and the contents of our website are not incorporated by reference into this Proxy Statement.

This Proxy Statement and the enclosed proxy card are being furnished in connection with the solicitation of proxies by our board of directors for use at the Annual Meeting and at any adjournment of that meeting. All proxies will be voted in accordance with the instructions they contain. If you do not specify your voting instructions on your proxy, it will be voted in accordance with the recommendations of our board of directors. We are making this Proxy Statement, the related proxy card and our annual report to stockholders for the fiscal year ended December 31, 2016 available to stockholders for the first time on or about April 24, 2017.

#### GENERAL INFORMATION ABOUT THE ANNUAL MEETING AND VOTING

# Why do I have access to these materials?

We have made these proxy materials available to you because our board of directors is soliciting your proxy to vote at the Annual Meeting to be held on June 13, 2017 at 9:00 a.m. Eastern Time, including at any adjournments or postponements of the meeting. As a holder of record of common stock as of the close of business on April 17, 2017, you are invited to attend the Annual Meeting and are requested to vote on the items of business described in this Proxy Statement. This Proxy Statement includes information that we are required to provide to you under the rules adopted by the Securities and Exchange Commission, or the SEC, and that is designed to assist you in voting your shares.

# Why did I receive a notice in the mail regarding the internet availability of proxy materials instead of a full set of proxy materials?

In accordance with SEC rules, we have elected to provide access to our proxy materials, including this Proxy Statement and our 2016 Annual Report, over the internet. Accordingly, we have sent a Notice Regarding the Availability of Proxy Materials, or the Notice, to our stockholders of record entitled to vote at the Annual Meeting with instructions for accessing the proxy materials and voting over the internet or by telephone. We mailed the Notice on or about April 24, 2017 to all stockholders entitled to vote at the Annual Meeting.

All stockholders entitled to vote at the Annual Meeting will have the ability to access the proxy materials by visiting the website referred to in the Notice, www.proxydocs.com/agio. This makes the proxy distribution

process more efficient and less costly and helps conserve natural resources. The Notice also contains instructions to request to receive a printed set of the proxy materials. You may request the proxy materials over the internet at www.investorelections.com/agio, by emailing paper@investorelections.com, or by calling (866) 648-8133.

The Notice also identifies the date, the time and location of the Annual Meeting; the matters to be acted upon at the meeting and our board of directors' recommendation with regard to each matter; a toll-free telephone number, an e-mail address, and a website where stockholders can request to receive, free of charge, a paper or e-mail copy of the Proxy Statement, our Annual Report on Form 10-K for the year ended December 31, 2016, and a form of proxy relating to the Annual Meeting; and information on how to access and vote the form of proxy.

# Can I vote my shares by filling out and returning the Notice?

No. The Notice identifies the items to be voted on at the Annual Meeting, but you cannot vote by marking the Notice and returning it. The Notice provides instructions on how to vote over the internet or by telephone, by requesting and returning a printed proxy card, or by submitting a ballot in person at the Annual Meeting.

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

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

# What is the purpose of the Annual Meeting?

At the Annual Meeting, stockholders will consider and vote on the following matters:

- (1) To elect three Class I directors, each to serve for a three-year term expiring at the 2020 annual meeting of stockholders and until his respective successor is duly elected and qualified.
- (2) To approve an advisory vote on the compensation paid to our named executive officers.

Stockholders will also act on any other business that may properly come before the meeting, or any adjournment or postponement thereof.

#### Who can vote?

Only stockholders of record at the close of business on April 17, 2017, the record date for the Annual Meeting, are entitled to vote at the Annual Meeting. On this record date, there were 42,394,060 shares of our common stock outstanding. Common stock is our only class of stock outstanding.

## How many votes do I have?

Each share of our common stock that you own as of the record date, April 17, 2017, entitles you to one vote on each matter that is voted on.

# Is my vote important?

Your vote is important no matter how many shares you own. Please take the time to vote. Take a moment to read the instructions, chose the way to vote that is the easiest and most convenient for you and cast your vote as soon as possible.

#### How do I vote?

If you are the "record holder" of your shares, meaning that you own your shares in your own name and not through a bank, brokerage firm or other nominee, you may vote:

- (1) **Over the Internet:** To vote over the internet, please go to the following website: *www.proxypush.com/agio*, and follow the instructions at that site for submitting your proxy electronically. If you vote over the internet, you do not need to complete and mail your proxy card or vote your proxy by telephone. Your vote must be received by 11:59 p.m. Eastern Time on June 12, 2017 to be counted.
- (2) **By Telephone:** To vote by telephone, please call (866) 509-2148, and follow the instructions provided on the proxy card. If you vote by telephone, you do not need to complete and mail your proxy card or vote your proxy over the internet. Your vote must be received by 11:59 p.m. Eastern Time on June 12, 2017 to be counted.
- (3) **By Mail:** To vote using the printed proxy card that may be delivered to you upon request, simply complete, sign and date the proxy card that may be delivered and return it promptly in the postage prepaid envelope provided to Proxy Tabulator for Agios Pharmaceuticals, Inc., c/o Mediant Communications, P.O. Box 8016, Cary, NC 27512-9903. If you vote by mail, you do not need to vote over the internet or by telephone. If we receive the proxy card no later than June 12, 2017, we will vote your shares as you direct.
- (4) **In Person at the Meeting:** If you attend the Annual Meeting, you may deliver your completed proxy card in person or you may vote by completing a ballot, which we will provide to you at the meeting.

**If your shares are held in "street name,"** meaning they are held for your account by a bank, brokerage firm, or other nominee, you may vote:

- (1) **Over the Internet or by Telephone:** You will receive instructions from your bank, brokerage firm, or other nominee if they permit internet or telephone voting. You should follow those instructions.
- (2) **By Mail:** You will receive instructions from your bank, brokerage firm, or other nominee explaining how you can vote your shares by mail. You should follow those instructions.
- (3) **In Person at the Meeting:** You must bring an account statement or letter from your bank, brokerage firm or other nominee showing that you are the beneficial owner of the shares as of the record date in order to vote your shares at the meeting. To be able to vote your shares held in street name at the meeting, you will need to obtain a proxy card from the holder of record.

#### Can I change my vote?

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

(1) Vote over the internet or by telephone as instructed above. Only your latest internet or telephone vote is counted. You may not change your vote over the internet or by telephone after 11:59 p.m., Eastern Time, on June 12, 2017.

- (2) Sign and complete a new proxy card and send it by mail to Proxy Tabulator for Agios Pharmaceuticals, Inc., c/o Mediant Communications, P.O. Box 8016, Cary, NC 27512-9903. Mediant must receive the proxy card no later than June 12, 2017. Only your latest dated proxy will be counted.
- (3) Attend the Annual Meeting and vote in person as instructed above. Attending the Annual Meeting alone will not revoke your internet vote, telephone vote or proxy submitted by mail, as the case may be.
- (4) Give our corporate secretary written notice before or at the meeting that you want to revoke your proxy. Such written notice should be sent to Agios Pharmaceuticals, Inc., Attention: Min Wang, Corporate Secretary, 88 Sidney Street, Cambridge, MA 02139.

If your shares are held in "street name," you may submit new voting instructions with a later date by contacting your bank, brokerage firm, or other nominee. You may also vote in person at the Annual Meeting, which will have the effect of revoking any previously submitted voting instructions, if you obtain a broker's proxy as described in the answer to the question "How do I vote?" above.

### Will my shares be voted if I do not return my proxy?

**If your shares are registered directly in your name,** your shares will not be voted if you do not vote over the internet, by telephone, by returning your proxy by mail or by ballot at the Annual Meeting.

If your shares are held in "street name," your brokerage firm may under certain circumstances vote your shares if you do not return your voting instructions. Brokerage firms can vote customers' unvoted shares on routine matters but they will not be allowed to vote your shares with respect to certain non-routine items. If you do not return voting instructions to your brokerage firm to vote your shares, your brokerage firm may, on routine matters, either vote your shares or leave your shares unvoted.

# Your brokerage firm cannot vote your shares on any matter that is not considered routine.

Proposal 1, election of directors, and Proposal 2, an advisory vote on the compensation paid to our named executive officers, are not considered routine matters. If you do not instruct your brokerage firm how to vote with respect to these items, your brokerage firm may not vote with respect to these proposals and those votes will be counted as "broker non-votes." "Broker non-votes" are shares that are held in "street name" by a bank or brokerage firm that indicates on its proxy that it does not have or did not exercise discretionary authority to vote on a particular matter. We encourage you to provide voting instructions to your brokerage firm or other nominee. This ensures that your shares will be voted at the Annual Meeting according to your instructions. You should receive directions from your brokerage firm or other nominee about how to submit your voting instructions.

## How many shares must be represented to hold the Annual Meeting?

A majority of our shares of common stock outstanding at the record date must be present in person or represented by proxy to hold the Annual Meeting. This is called a quorum. For purposes of determining whether a quorum exists, we count as present any shares that are voted over the internet, by telephone, by completing and submitting a proxy by mail, or that are represented in person at the meeting. Further, for purposes of establishing a quorum, we will count as present shares that a stockholder holds even if the stockholder votes to abstain or only votes on one of the proposals. In addition, we will count as present shares held in "street name" by banks, brokerage firms or nominees who indicate on their proxies that they do not have authority to vote those shares on Proposals 1 or 2. If a quorum is not present, we expect to adjourn the Annual Meeting until we obtain a quorum.

The presence at the Annual Meeting, in person or by proxy, of holders representing a majority of our outstanding common stock as of the record date, April 17, 2017, or approximately 21,197,031 shares, constitutes a quorum at the meeting and permits us to conduct the business of the meeting.

# What vote is required to approve each matter and how are votes counted?

#### Proposal 1 — Election of Directors

The three nominees for director to receive the highest number of votes FOR election will be elected as directors. This is called a plurality. **Proposal 1 is not considered a routine matter.** Therefore, if your shares are held by your brokerage firm in "street name" and you do not provide voting instructions with respect to your shares, your brokerage firm cannot vote your shares on Proposal 1. Shares held in "street name" by banks, brokerage firms, or nominees who indicate on their proxies that they do not have authority to vote the shares on Proposal 1 will not be counted as votes FOR or WITHHELD from any nominee. As a result, such "broker non-votes" will have no effect on the voting on Proposal 1. You may:

- vote FOR all nominees;
- vote FOR a particular nominee or nominees and WITHHOLD your vote from the other nominees;
- WITHHOLD your vote from all nominees.

Votes that are withheld will not be included in the vote tally for the election of directors and will not affect the results of the vote.

# Proposal 2 — Advisory Vote on the Compensation Paid to Named Executive Officers

To approve Proposal 2, holders of a majority of the votes cast on the matter must vote FOR the proposal. **Proposal 2 is not considered a routine matter.** Shares which abstain and broker non-votes will not be counted as votes in favor of, or with respect to, these proposals and will also not be counted as votes cast. Accordingly, abstentions and broker non-votes will have no effect on the outcome of these proposals. Proposal 2 is non-binding. Because this vote is advisory and not binding on us or our board in any way, our board may decide that it is in our and our stockholders' best interests to compensate our named executive officers in an amount or manner that differs from that which is approved by our stockholders.

# How does the board of directors recommend that I vote on the proposals?

Our board of directors recommends that you vote:

- **FOR** the election of each of the three nominees to serve on our board of directors, each for a three-year term; and
- **FOR** the approval, on an advisory (non-binding) basis, of the compensation of our named executive officers.

# Are there other matters to be voted on at the Annual Meeting?

We do not know of any matters that may come before the Annual Meeting other than the election of our board of directors and the approval of the compensation of our named executive officers. If any other matters are properly presented at the Annual Meeting, the persons named in the accompanying proxy intend to vote, or otherwise act, in accordance with their judgment on the matter.

#### Who will count the votes?

The votes will be counted, tabulated and certified by Mediant Communications Inc.

## Will my vote be kept confidential?

Your vote will be kept confidential and we will not disclose your vote, unless (1) we are required to do so by law (including in connection with the pursuit or defense of a legal or administrative action or proceeding), or (2) there is a contested election for the board of directors. The inspector of election will forward any written comments that you make on the proxy card to management without providing your name, unless you expressly request disclosure on the proxy card.

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

Preliminary voting results will be announced at the Annual Meeting. Final voting results will be tallied by the inspector of election and published in a current report on Form 8-K to be filed with the Securities and Exchange Commission, or SEC, within four business days after the Annual Meeting.

# How and when may I submit a stockholder proposal, including stockholder nomination for director for the 2018 annual meeting?

Stockholders wishing to suggest a candidate for director should write to our corporate secretary. In order to give the nominating and corporate governance committee sufficient time to evaluate a recommended candidate and/or include the candidate in our proxy statement for the 2018 annual meeting, the recommendation should be received by our corporate secretary at our principal executive offices in accordance with our procedures detailed in the section below entitled "Stockholder Proposals." Such submissions must state the nominee's name, together with appropriate biographical information and background materials, and information with respect to the stockholder or group of stockholders making the recommendation, including the number of shares of common stock owned by such stockholder or group of stockholders, as well as other information required by our bylaws or SEC regulations. We may require any proposed nominee to furnish such other information as we may reasonably require in determining the eligibility of such proposed nominee to serve as an independent director or that could be material to a reasonable stockholder's understanding of the independence, or lack thereof, of such proposed nominee.

#### Who is paying the costs of soliciting these proxies?

We will pay all of the costs of soliciting proxies. Our directors, officers and other employees may solicit proxies in person or by mail, telephone, fax or email. We will pay our directors, officers and other employees no additional compensation for these services. We will ask banks, brokerage firms and other nominees to forward these proxy materials to their principals and to obtain authority to execute proxies. We may reimburse them for their expenses.

# How do I obtain an Annual Report on Form 10-K?

If you would like a copy of our Annual Report on Form 10-K for the year ended December 31, 2016 that we filed with the SEC, we will send you one, without exhibits, free of charge. Please contact Renee Leck, Investor Relations. She may be contacted at 88 Sidney Street, Cambridge, Massachusetts 02139; telephone: 617-649-8600; e-mail: renee.leck@agios.com.

All of our SEC filings are also available free of charge in the "Investors—Financials—SEC Filings" section of our website at www.agios.com.

# Whom should I contact if I have any questions?

If you have any questions about the Annual Meeting or your ownership of our common stock, please contact Renee Leck in our Investor Relations department. She may be contacted at 88 Sidney Street, Cambridge, Massachusetts 02139; telephone: 617-649-8600; e-mail: renee.leck@agios.com.

#### STOCKHOLDERS SHARING THE SAME ADDRESS

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

This year, a number of brokers with account holders who are our stockholders will be "householding" our proxy materials. A single Notice and, if applicable, a single set of our proxy materials, will be delivered to multiple stockholders sharing an address unless contrary instructions have been received from the affected stockholders. Once you have received notice from your broker that they will be "householding" communications to your address, "householding" will continue until you are notified otherwise or until you revoke your consent.

If, at any time, you no longer wish to participate in "householding" and would prefer to receive a separate Notice and, if applicable, a single set of proxy materials, please notify your broker or contact us. To contact us, direct your written request to: Agios Pharmaceuticals, Inc., 88 Sidney Street, Cambridge, MA 02139, Attention: Corporate Secretary, 617-649-8600 or contact Investor Relations at 617-649-8600. Stockholders who currently receive multiple copies of the Notice, and, if applicable, our annual report and other proxy materials at their addresses and would like to request "householding" of their communications should contact their brokers or us.

#### SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth information relating to the beneficial ownership of our common stock as of March 31, 2017, by:

- each person known by us to beneficially own more than 5% of our outstanding shares of common stock;
- each of our directors and nominees for director;
- our principal executive officer, our principal financial officer and our other executive officers named in the Summary Compensation Table below, whom we collectively refer to as our named executive officers; and
- all directors and executive officers as a group.

The percentage of shares beneficially owned is computed on the basis of 42,382,901 shares of our common stock outstanding as of March 31, 2017. The number of shares beneficially owned by each stockholder is determined under rules of the Securities and Exchange Commission. Under these rules, beneficial ownership includes any shares as to which the individual or entity has sole or shared voting power or investment power. In computing the number of shares beneficially owned by an individual or entity and the percentage ownership of that person, shares of common stock subject to options or other rights held by such person that are currently exercisable or will become exercisable within 60 days of March 31, 2017 are considered outstanding, although these shares are not considered outstanding for purposes of computing the percentage ownership of any other person. Unless otherwise indicated, the address of all listed stockholders is c/o Agios Pharmaceuticals, Inc., 88 Sidney Street, Cambridge, MA 02139. Each of the stockholders listed has sole voting and investment power with respect to the shares beneficially owned by the stockholder unless noted otherwise, subject to community property laws where applicable.

Common

	Shares of Common Stock	Stock Underlying Options and Other Rights Acquirable Within 60	Total Benefi	icial Ownership
Name of Beneficial Owner	Owned	+ Days	Number	Percentage
5% Stockholders				
Entities affiliated with Fidelity Management & Research				
Company(1)	6,302,216		6,302,216	14.87%
Wellington Management Group LLP(2)	5,882,068	_	5,882,068	13.88%
Entities affiliated with Celgene Corporation(3)	5,242,704	_	5,242,704	12.37%
Entities affiliated with Capital Research and Management				
Company(4)	4,868,223	_	4,868,223	11.49%
Vanguard Specialized Funds – Vanguard Healthcare Fund(5)	3,581,634		3,581,634	8.45%
BB Biotech AG(6)	2,809,528		2,809,528	6.63%
The Vanguard Group(7)	2,468,232	_	2,468,232	5.82%
BlackRock, Inc.(8)	2,145,870	_	2,145,870	5.06%
Named Executive Officers and Directors				
David P. Schenkein, M.D.(9)	351,354	890,880	1,242,234	2.87%
Andrew Hirsch	_	_	_	*
Steve Hoerter	_	31,249	31,249	*
Scott Biller, Ph.D.(10)	46,734	203,862	250,596	*
Christopher Bowden, M.D.	830	108,337	109,167	*
Glenn Goddard(11)	_	47,413	47,413	*
Lewis C. Cantley, Ph.D.(12)	238,560	168,579	407,139	*
Paul J. Clancy		47,566	47,566	*
Ian T. Clark		_	_	*
Kaye Foster		27,000	27,000	*
Maykin Ho, Ph.D.		10,175	10,175	*
John M. Maraganore, Ph.D.	49,764	33,125	82,889	*
Robert T. Nelsen	109,230	23,125	132,355	*
All executive officers and directors as a group (13 persons)	796,472	1,591,311	2,387,783	5.43%

- \* Less than 1%.
- (1) Based solely on a Schedule 13G/A filed with the SEC on February 14, 2017. FMR LLC and Abigail P. Johnson are each the beneficial owners of 6,302,216 shares of common stock. FMR LLC has sole voting power over 930,565 shares of common stock and sole dispositive power over 6,302,216 shares of common stock, and Abigail P. Johnson has sole dispositive power over 6,302,216 shares of common stock. The address of FMR LLC is 245 Summer Street, Boston, MA 02210.
- (2) Based solely on a Schedule 13G/A filed with the SEC on February 9, 2017. Wellington Management Group LLP ("Wellington") is deemed to be the beneficial owner of 5,882,068 shares of common stock, with respect to which it reported shared voting power over 2,023,262 shares and shared dispositive power over 5,882,068 shares. The address of Wellington is 280 Congress Street, Boston, MA 02210.
- (3) Based solely on a Schedule 13D/A filed with the SEC on December 17, 2014. Consists of 4,010,926 shares of common stock held by Celgene European Investment Company LLC ("Celgene LLC"), 708,333 shares of common stock held by Celgene Alpine Investment Co., LLC ("Celgene Alpine LLC") and 523,445 shares of common stock held by Celgene Corporation ("Celgene"). Celgene LLC and Celgene Alpine LLC are wholly-owned subsidiaries of Celgene Corporation. Celgene LLC has shared voting and dispositive power over 4,010,926 shares of common stock, Celgene Alpine LLC has shared voting and dispositive power over 708,333 shares of common stock and Celgene has sole voting and dispositive power over 523,445 shares of common stock and shared voting and dispositive power over 4,719,259 shares of common stock. The address of Celgene Corporation is 86 Morris Avenue, Summit, NJ 07901.
- (4) Based solely on a Schedule 13G/A filed by Capital World Investors with the SEC on February 13, 2017 and a Schedule 13G/A filed by Capital International Investors with the SEC on January 9, 2017. Consists of 663,000 shares of common stock held by Capital World Investors and 4,205,223 shares of common stock held by Capital International Investors. Capital World Investors and Capital International Investors are divisions of Capital Research and Management Company ("CRMC"), which acts as investment adviser to various investment companies registered under Section 8 of the Investment Company Act of 1940. Capital World Investors has sole voting and dispositive power over 663,000 shares of common stock. Capital International Investors has sole voting power over 3,739,823 shares of common stock and sole dispositive power over 4,205,223 shares of common stock. The address of Capital World Investors is 333 South Hope Street, Los Angeles, CA 90071. The address of Capital International Investors is 11100 Santa Monica Boulevard, 16th Floor, Los Angeles, CA, 90025.
- (5) Based solely on a Schedule 13G/A filed with the SEC on February 13, 2017. Vanguard Specialized Funds Vanguard Health Care Fund ("Vanguard Healthcare Fund") is deemed to be the beneficial owner of 3,581,634 shares of common stock, with respect to which it reported sole voting power over 3,581,634 shares. The address of Vanguard Healthcare Fund is 100 Vanguard Blvd., Malvern, PA 19355.
- (6) Based solely on a Schedule 13G/A filed with the SEC on February 14, 2017. BB Biotech AG ("BB Biotech") and its wholly-owned subsidiary Biotech Target N.V. ("Biotech Target") share voting and dispositive power over 2,809,528 shares of common stock. The address of BB Biotech is Schwertstrasse 6, CH-8200 Schaffhausen, Switzerland and the address of Biotech Target is Snipweg 26, Curacao.
- (7) Based solely on a Schedule 13G filed with the SEC on February 9, 2017. The Vanguard Group ("Vanguard") is deemed to be the beneficial owner of 2,468,232 shares of common stock, with respect to which it reported sole voting power over 18,473 shares, shared voting power over 3,353 shares, sole dispositive power over 2,448,120 shares and shared dispositive power over 20,112 shares. Includes 16,759 shares beneficially owned by Vanguard Fiduciary Trust Company, a wholly owned subsidiary of The

Vanguard Group, Inc. as a result of Vanguard Fiduciary Trust Company serving as investment manager of collective trust accounts. Vanguard Investments Australia, Ltd., a wholly owned subsidiary of The Vanguard Group, Inc., is the beneficial owner of 5,067 shares as a result of Vanguard Investments Australia, Ltd. serving as investment manager of Australian investment offerings. The address of Vanguard is 100 Vanguard Blvd., Malvern, PA 19355.

- (8) Based solely on a Schedule 13G filed with the SEC on January 30, 2017 by BlackRock, Inc. ("BlackRock") and certain of its subsidiaries. BlackRock is deemed to be the beneficial owner of 2,145,870 shares of common stock, with respect to which it reported sole voting power over 2,032,583 shares and sole dispositive power over 2,145,870 shares. The address of BlackRock 55 East 52nd Street, New York, NY 10055.
- (9) Includes 272,272 shares of common stock held by the David P. Schenkein 2004 Revocable Trust, and 79,082 shares of common stock held by the Amy P. Schenkein 2004 Revocable Trust.
- (10) Includes 15,470 shares of common stock held by Dr. Biller and 31,000 shares of common stock held in trust for the benefit of Dr. Biller's spouse.
- (11) Mr. Goddard resigned as our senior vice president, finance effective as of November 2, 2016.
- (12) Includes 94,260 shares of common stock held by Dr. Cantley, 94,300 shares of common stock held by Dr. Cantley's spouse, and 50,000 shares of common stock held in grantor retained annuity trusts for which Dr. Cantley or Dr. Cantley's spouse is trustee and sole annuitant.

# SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Under Section 16(a) of the Exchange Act, directors, executive officers and beneficial owners of 10% or more of our common stock, or reporting persons, are required to report to the SEC on a timely basis the initiation of their status as a reporting person and any changes with respect to their beneficial ownership of our common stock. Based solely on our review of copies of such forms that we have received, or written representations from reporting persons, we believe that during the fiscal year ended December 31, 2016, all executive officers, directors and greater than 10% stockholders complied with all applicable filing requirements, except with respect to a Form 4 filing made on February 10, 2016 to report shares of common stock acquired upon the exercise of a stock option by Dr. Biller on February 3, 2016.

# PROPOSAL 1: ELECTION OF DIRECTORS

Our board of directors is divided into three classes, with one class of our directors standing for election each year. Directors in each class are elected at the annual meeting of stockholders held in the year in which the term for their class expires and hold office for a three-year term and until their resignation or removal or their successors are duly elected and qualified. In accordance with our certificate of incorporation and bylaws, our directors may fill existing vacancies on the board of directors.

The term of office of our Class I directors, Lewis C. Cantley, Ph.D., Paul J. Clancy and Ian T. Clark, will expire at the Annual Meeting. The nominees for Class I directors for election at the Annual Meeting are Dr. Cantley, Mr. Clancy and Mr. Clark. If any of Dr. Cantley, Mr. Clancy or Mr. Clark is elected at the Annual Meeting, such individual will be elected to serve for a three-year term that will expire at our 2020 annual meeting of stockholders and until such individual's successor is elected and qualified.

If no contrary indication is made, proxies in the accompanying form will be voted for Dr. Cantley, Mr. Clancy and Mr. Clark or, in the event that any of Dr. Cantley, Mr. Clancy or Mr. Clark is not a candidate or is unable to serve as a director at the time of the election (which is not currently expected), for any nominee who is designated by our board of directors to fill the vacancy.

Our priority in selection of board members is identification of members who will further the interests of our stockholders through their established record of professional accomplishment, the ability to contribute positively to the collaborative culture among board members, knowledge of our business, understanding of the competitive landscape and adherence to high ethical standards. Certain individual qualifications and skills of our directors that contribute to the board of directors' effectiveness as a whole are described in the following paragraphs.

#### **Information Regarding Directors**

The following paragraphs provide information as of the date of this Proxy Statement about each director and nominee for director, as furnished to us by the directors and nominees for director. The information presented includes information each such individual has given us about his or her age, all positions he or she holds, his or her principal occupation and business experience for the past five years, and the names of other publicly-held companies of which he or she currently serves as a director or has served as a director during the past five years. In addition to the information presented below regarding each such individual's specific experience, qualifications, attributes and skills that led our board to the conclusion that he or she should serve as a director, we also believe that each of our directors and director nominees has a reputation for integrity, honesty and adherence to high ethical standards. Each has demonstrated business acumen and an ability to exercise sound judgment, as well as a commitment of service to our company and our board. Finally, we value their significant experience on other public company boards of directors and board committees.

Information about the number of shares of common stock beneficially owned by each of our directors and nominees for director appears above under the heading "Security Ownership of Certain Beneficial Owners and Management."

There are no family relationships between or among any of our executive officers, directors or nominees for director.

#### Nominees for Election to the Board of Directors

#### Term Expiring at the 2020 Annual Meeting of Stockholders (Class I)

Name	Age	Present Position with Agios Pharmaceuticals, Inc.	
Lewis C. Cantley, Ph.D.	68	Director	
Paul J. Clancy	55	Director	
Ian T. Clark	56	Director	

Lewis C. Cantley, Ph.D. has served as a member of our board of directors since August 2007. Dr. Cantley has served as a director of the Cancer Center at Weill Cornell Medical College and New York-Presbyterian Hospital since 2012. Prior to that, from 1992 to 2012, Dr. Cantley was a professor of systems biology at Harvard Medical School and chief of the division of Signal Transduction at Beth Israel Deaconess Medical Center, a major teaching hospital of Harvard Medical School in Boston. From 2007 to 2012, Dr. Cantley also served as director of the Cancer Center at Beth Israel Deaconess Medical Center. Dr. Cantley is a member of the American Academy of Arts and Sciences and the National Academy of Sciences, and serves on the editorial boards of the journals Cell and the Journal of Cell Biology. He currently serves on the board of directors of the American Association of Cancer Research and Hope Foundation for Cancer Research, non-profit organizations that promote cancer research. Dr. Cantley is the recipient of the 2005 Pezcoller Foundation-American Association for Cancer Research International Award for Cancer Research, for his leadership in the field of signal transduction, including the discovery of the phosphatidylinositol-3-kinase (PI3K) signaling pathway. Dr. Cantley received his B.S. in chemistry from West Virginia Wesleyan College, and obtained a Ph.D. in biophysical chemistry from Cornell University. Dr. Cantley's qualifications to sit on our board of directors include his position as a foremost expert in understanding the biochemical pathways linking cancer and metabolism.

Paul J. Clancy has served as a member of our board of directors since September 2013. Mr. Clancy has more than 20 years of experience in financial management and strategic business planning, and has served as the executive vice president and chief financial officer at Biogen Inc. (formerly Biogen Idec), a publicly-traded biopharmaceutical company, since 2007. He also served as senior vice president of finance of Biogen Idec, with responsibilities for leading the treasury, tax, investor relations and business planning groups. Prior to the merger of Biogen and Idec Pharmaceutical Corporation, Mr. Clancy was the vice president of portfolio management at Biogen Inc. He joined Biogen Inc. in 2001 as vice president of U.S. marketing. Before Biogen Inc., Mr. Clancy spent 13 years at PepsiCo Inc., a publicly-traded food and beverage company, serving in a variety of financial and general management positions, including vice president and general manager of their Great West Business Unit. Mr. Clancy is a member of the Board of Directors of Incyte Corporation, a biopharmaceutical company. Mr. Clancy has an M.B.A. from Columbia Business School in New York City and received his B.S. in business administration from Babson College in Wellesley, MA. We believe Mr. Clancy is qualified to serve as a member of our board of directors due to his extensive financial and executive leadership experience at large multinational companies.

*Ian T. Clark* has served as a member of our board of directors since December 2016. Mr. Clark has more than 30 years of experience in the biotechnology industry. Most recently, he was chief executive officer and head of North American Commercial Operations of Genentech, Inc., a pharmaceutical company (now a member of the Roche Group, a global healthcare company), a position he held since 2010. Mr. Clark also led the Genentech executive committee and was a member of the Genentech board of directors. Mr. Clark joined Genentech in 2003 as senior vice president and general manager, bio-oncology. In 2005, he was named senior vice president, commercial operations and became a member of the executive committee, and in 2006, he was named executive vice president, commercial operations. In 2009, he was named head of global product strategy and chief marketing officer of Roche. Prior to joining Genentech, Mr. Clark served as general manager of Novartis Canada, overseeing all of the company's Canadian operations. Before assuming his post in Canada, Mr. Clark served as chief operating officer for Novartis United Kingdom. Prior to joining Novartis in 1999, Mr. Clark

worked in vice presidential roles in sales and marketing for Sanofi-Synthelabo SA (Aventis SA) and Ivax Pharmaceuticals, Inc. in the United Kingdom, France and Eastern Europe. Mr. Clark is a member of the boards of directors of Shire plc, Corvus Pharmaceuticals, Inc. and Kite Pharma, Inc., each publicly-traded biopharmaceutical companies, TerraVia Holdings, Inc., a publicly-traded renewable and bioproducts company, and the Gladstone Foundation, an independent, nonprofit life science research organization. In addition, Mr. Clark serves on the executive committee of the Biotechnology Industry Organization (BIO) Industry Association, is chair of the advisory committee for the Institute of Life Sciences at Southampton University in the United Kingdom, and is a member of the Federal Reserve Bank of San Francisco's Economic Advisory Council and the Technology Network Executive Council. Mr. Clark received a B.S. degree in biological sciences from Southampton University in the United Kingdom. We believe Mr. Clark is qualified to serve as a member of our board of directors due to his extensive experience in and knowledge of the biotechnology sector and his leadership experience.

#### Recommendation of the Board of Directors

OUR BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT THE STOCKHOLDERS VOTE FOR THE ELECTION OF DR. LEWIS C. CANTLEY, MR. PAUL J. CLANCY AND MR. IAN T. CLARK.

### Members of the Board of Directors Continuing in Office

# Term Expiring at the 2018 Annual Meeting of Stockholders (Class II)

Name	Age	Present Position with Agios Pharmaceuticals, Inc.
Kaye Foster	57	Director
Maykin Ho, Ph.D.	64	Director
John M. Maraganore, Ph.D.	54	Director

Kaye Foster has served as a member of our board of directors since December 2014. Ms. Foster has more than 25 years of experience in human resources in the pharmaceutical industry and is the former senior vice president, global human resources at Onyx Pharmaceuticals, Inc., an Amgen, Inc. subsidiary and a biopharmaceutical company. At Onyx, which was acquired by Amgen in 2013, she led all aspects of human resources for U.S. and global operations. Prior to joining Onyx, Ms. Foster was global vice president of human resources and an executive committee member at Johnson and Johnson Corporation, a publicly-traded healthcare company, from 2003 to 2010. Before Johnson and Johnson, Ms. Foster held several senior human resources executive positions with Pfizer Inc., a publicly-traded pharmaceuticals company, supporting its pharmaceuticals businesses in Japan, Asia, Africa, Middle East and Latin America and, notably, led the integration of both the Warner-Lambert and Pharmacia mergers for these regions. Prior to that, she gained 10 years of operational experience within The Yellow Pages. She currently serves on the board of directors of Stanford Health Care, a hospital and healthcare system, and also serves on the boards of Spelman College, Glide Memorial Church and Girls for a Change. She earned her undergraduate degree at Baruch College of the City University of New York and received her M.B.A. from Columbia University, Graduate School of Business. We believe Ms. Foster's qualifications to serve on our board of directors include her extensive experience as an executive in the pharmaceuticals industry.

Maykin Ho, Ph.D. has served as a member of our board of directors since June 2015. Dr. Ho has more than 30 years of experience in the healthcare and finance industries. Dr. Ho has been a venture partner at Qiming Venture Partners, a venture capital firm in China and Hong Kong, since July 2015. From July 1992 to February 2015, she held various positions at Goldman Sachs, a global investment bank, including: from 2010 to 2015, she served as advisory director of global healthcare investment banking; from 2002 to 2010, she served as partner

and co-head of healthcare investment research; and from 1992 to 2010 she served as senior biotechnology research analyst. Previously, Dr. Ho held various managerial positions in licensing, strategic planning, marketing and research at DuPont-Merck Pharmaceuticals and DuPont de Nemours & Company, a global pharmaceutical company. She is a member of the board of directors and chair of the audit committee for the Aaron Diamond AIDS Research Center, a non-profit organization in New York, and serves on the board of directors of PAREXEL International, a publicly-traded multinational life sciences consulting firm. She also served on the investment committee of the Society of Neuroscience. Dr. Ho was a postdoctoral fellow at the pathology department of Harvard Medical School and a graduate of the Advanced Management Program at The Fuqua School of Business, Duke University. She received a Ph.D. in microbiology and immunology and a B.S. from the State University of New York, Downstate Medical Center. We believe Dr. Ho is qualified to serve on our board of directors due to her extensive experience in healthcare investment banking.

John M. Maraganore, Ph.D. has served as a member of our board of directors since November 2011. Since 2002, Dr. Maraganore has served as the chief executive officer and as a director of Alnylam Pharmaceuticals, Inc., a publicly-traded biopharmaceutical company. From 2002 to 2007, Dr. Maraganore served as president of Alnylam. From 2000 to 2002, Dr. Maraganore served as senior vice president, strategic product development with Millennium Pharmaceuticals, Inc., a biopharmaceutical company (now Takeda Oncology). Before Millennium, he served as director of molecular biology and director of market and business development at Biogen. Prior to Biogen, Dr. Maraganore was a scientist at ZymoGenetics, Inc., a biotechnology company, and The Upjohn Company, a pharmaceutical manufacturing company. Dr. Maraganore is a director of bluebird bio, Inc., a publicly-traded biopharmaceutical company. In addition, he was formerly a venture partner at Third Rock Ventures, L.P., where he participated in a limited capacity focusing on guiding strategy for Third Rock and its portfolio companies, and was formerly chairman of the board of directors of Regulus Therapeutics, Inc., a publicly-traded company. He is also a member of the Immunology Advisory Council of Harvard Medical School and a member of the board of directors of the Biotechnology Industry Organization. Dr. Maraganore holds an M.S. and a Ph.D. in Biochemistry and Molecular Biology from the University of Chicago and a B.A. in Biological Sciences also from the University of Chicago. Dr. Maraganore has over 25 years of experience in the biotechnology industry, bringing to our board critical scientific, research and development, and general management expertise.

# Term Expiring at the 2019 Annual Meeting of Stockholders (Class III)

Name	Age	Present Position with Agios Pharmaceuticals, Inc.
David P. Schenkein, M.D.	59	President and Chief Executive Officer and Director
Robert T. Nelsen	53	Director

David P. Schenkein, M.D. joined Agios in August 2009 as president, chief executive officer and a member of our board of directors. Dr. Schenkein has been a hematologist and medical oncologist for more than 20 years. He currently serves as an adjunct attending physician in hematology at Tufts Medical Center. Prior to joining Agios, from 2006 to 2009, Dr. Schenkein was the senior vice president, clinical hematology/oncology at Genentech, where he was responsible for numerous successful oncology drug approvals and leading the medical and scientific strategies for its bio-oncology portfolio. While at Genentech, he served as an adjunct clinical professor of medical oncology at Stanford University School of Medicine. Prior to joining Genentech, he served as the senior vice president of clinical research at Millennium, overseeing the clinical development and worldwide approval of VELCADE®, a first-in-class cancer therapy now approved to treat multiple myeloma and non-Hodgkins lymphoma. Dr. Schenkein currently serves on the board of directors of Foundation Medicine, Inc. and bluebird bio, both public biotechnology companies, and of Denali Therapeutics Inc., a private biotechnology company. Dr. Schenkein holds a B.A. in chemistry from Wesleyan University and an M.D. from the State University of New York Upstate Medical School. We believe that Dr. Schenkein's detailed knowledge of our company and his extensive background in the biotechnology industry, including his roles at Genentech and Millennium, provide a critical contribution to our board of directors.

Robert T. Nelsen has served as a member of our board of directors since December 2007. Mr. Nelsen was a co-founder of ARCH Venture Partners, a venture capital firm, and has served in various capacities for ARCH and affiliated entities since 1986. Mr. Nelson is currently a managing director of ARCH Venture Corporation. Mr. Nelsen has played a significant role in the early sourcing, financing and development of more than 30 companies. Mr. Nelsen is a director of Sapphire Energy, Inc., Ensemble Therapeutics Corporation, Juno Therapeutics, Inc., Syros Pharmaceuticals Inc., Arivale Inc., Denali Therapeutics, and Faraday Pharmaceuticals, Inc., among other companies, and previously served on the boards of Bellerophon Therapeutics, Inc., Fate Therapeutics, Inc., Elixir Pharmaceuticals, Inc., Ikaria Inc., Kythera Biopharmaceuticals, Inc., NeurogesX, Inc., Sage Therapeutics, Inc., and entities affiliated with deCode Genetics, Inc., among others. Mr. Nelsen was previously a Trustee of the Fred Hutchinson Cancer Research Institute, the Institute for Systems Biology, and a director of the National Venture Capital Association. Mr. Nelsen previously served Mr. Nelsen received a B.S. with majors in biology and economics from the University of Puget Sound and an M.B.A. from the University of Chicago. We believe Mr. Nelsen is qualified to sit on our board of directors due to his extensive experience as an investor in, and director of, early stage biopharmaceutical and life sciences companies.

#### CORPORATE GOVERNANCE

#### General

We believe that good corporate governance is important to ensure that Agios Pharmaceuticals, Inc. is managed for the long-term benefit of our stockholders. This section describes key corporate governance practices that we have adopted. We have adopted a code of business conduct and ethics, which applies to all of our officers, directors and employees, corporate governance guidelines and charters for our audit committee, our compensation committee, our nominating and governance committee and our science and technology committee. We have posted copies of our code of business conduct and ethics and corporate governance guidelines, as well as each of our committee charters, on the Corporate Governance page of the Investors section of our website, www.agios.com, which you can access free of charge. Information contained on the website is not incorporated by reference in, or considered part of, this Proxy Statement. We intend to disclose on our website any amendments to, or waivers from, our code of business conduct and ethics that are required to be disclosed by law or NASDAQ listing standards. We will also provide copies of these documents, as well as our other corporate governance documents, free of charge, to any stockholder upon written request to Renee Leck, Investor Relations, at 88 Sidney Street, Cambridge MA 02139, telephone: 617-649-8600; e-mail: renee.leck@agios.com.

#### **Corporate Governance Guidelines**

Our Board has adopted corporate governance guidelines to assist in the exercise of its duties and responsibilities and to serve the best interests of Agios and our stockholders. These guidelines, which provide a framework for the conduct of our board's business, provide that:

- our board's principal responsibility is to oversee the management of Agios;
- a majority of the members of our board shall be independent directors;
- the independent directors meet regularly in executive session;
- directors have full and free access to management and, as necessary and appropriate, independent advisors;
- new directors participate in an orientation program and all directors are expected to participate in continuing director education on an ongoing basis; and
- our board and its committees will conduct a self-evaluation periodically to determine whether they are functioning effectively.

### **Director Determination of Independence**

Rule 5605 of the NASDAQ Listing Rules requires a majority of a listed company's board of directors to be comprised of independent directors within one year of listing. In addition, the NASDAQ Listing Rules require that, subject to specified exceptions, each member of a listed company's audit, compensation and nominating and corporate governance committees be independent, that audit committee members also satisfy independence criteria set forth in Rule 10A-3 under the Securities Exchange Act of 1934, as amended, or the Exchange Act and that compensation committee members also satisfy the independence criteria set forth in Rule 10C-1 under the Exchange Act.

Under Rule 5605(a)(2) of the NASDAQ Listing Rules, a director will only qualify as an "independent director" if, in the opinion of our board of directors, that person does not have a relationship that would interfere

with the exercise of independent judgment in carrying out the responsibilities of a director. In order to be considered independent for purposes of Rule 10A-3 of the Exchange Act, a member of an audit committee of a listed company may not, other than in their capacity as a member of the audit committee, the board of directors, or any other board committee, accept, directly or indirectly, any consulting, advisory, or other compensatory fee from the listed company or any of its subsidiaries or otherwise be an affiliated person of the listed company or any of its subsidiaries.

In addition, in affirmatively determining the independence of any director who will serve on a company's compensation committee, Rule 10C-1 under the Exchange Act requires that a company's board of directors consider all factors specifically relevant to determining whether a director has a relationship to such company which is material to that director's ability to be independent from management in connection with the duties of a compensation committee member, including, but not limited to: (i) the source of compensation of the director, including any consulting advisory or other compensatory fee paid by such company to the director; and (ii) whether the director is affiliated with the company or any of its subsidiaries or affiliates.

Our board of directors undertook a review of the composition of our board of directors and its committees and the independence of each director. Based upon information requested from and provided by each director concerning his or her background, employment and affiliations, including family relationships, our board of directors has determined that each of our directors, with the exception of Drs. Schenkein and Cantley, is an "independent director" as defined under Rule 5605(a)(2) of the NASDAQ Listing Rules. Our board of directors also determined that Douglas C. Cole, Perry Karsen and Marc Tessier-Lavigne, each a former director, were "independent directors" prior to their resignations from our board of directors in 2016, in the case of Mr. Karsen and Dr. Tessier-Lavigne, and in 2017, in the case of Dr. Cole. In addition, our board of directors determined that Mr. Clancy, Dr. Ho and Dr. Maraganore, who comprise our audit committee, Ms. Foster, Dr. Maraganore and Mr. Nelsen, who comprise our compensation committee, and Mr. Clark, Ms. Foster and Dr. Ho, who are members of our nominating and corporate governance committee, satisfy the independence standards for such committees established by the Securities and Exchange Commission and the NASDAQ Listing Rules, as applicable. In making such determinations, our board of directors considered the relationships that each such non-employee director has with our company, including any relevant transactions described below in "Certain Relationships and Related Party Transactions" and the beneficial ownership of our capital stock by each non-employee director, as well as all other facts and circumstances our board of directors deemed relevant in determining independence.

# **Board Leadership Structure**

Our board of directors, upon the recommendation of our nominating and corporate governance committee, has determined that the roles of chairman of the board and chief executive officer should be separated at the current time. Accordingly, our Board has appointed Dr. Maraganore, an independent director within the meaning of NASDAQ Listing Rules (see "Director Determination of Independence" above), as the chairman of the board of directors. Dr. Maraganore possesses an in-depth knowledge of our issues, opportunities and challenges. We believe he is the person best positioned to ensure our board of directors' time and attention is focused on the most critical matters. Our board of directors believes Dr. Maraganore is a decisive leader who commands accountability and enhances our ability to communicate our message and strategy clearly and consistently to stockholders, employees and strategic partners. Dr. Maraganore's duties as chairman of the board include the following:

- chairing meetings of the independent directors in executive session;
- meeting with any director who is not adequately performing his or her duties as a member of our board or any committee;

- facilitating communications between other members of our board and the chief executive officer;
- preparing or approving the agenda for each board meeting;
- determining the frequency and length of board meetings and recommending when special meetings of our board should be held; and
- reviewing and, if appropriate, recommending action to be taken with respect to written communications from stockholders submitted to our board (see "Communications with Our Board of Directors" below).

Our board decided to separate the roles of chairman and chief executive officer because it believes that leadership structure offers the following benefits:

- increasing the independent oversight of Agios and enhancing our board's objective evaluation of our chief executive officer:
- freeing the chief executive officer to focus on company operations instead of board administration;
- providing the chief executive officer with an experienced sounding board;
- providing greater opportunities for communication between stockholders and our board;
- enhancing the independent and objective assessment of risk by our board; and
- providing an independent spokesman for our company.

Although our board decided to separate the roles of chairman and chief executive officer, our nominating and corporate governance committee believes it is appropriate for our chief executive officer to serve as a member of our board of directors.

#### **Director Nomination Process**

Director Qualifications

In evaluating director nominees the nominating and corporate governance committee will consider among other things the following factors:

- reputation for personal and professional integrity, honesty and adherence to high ethical standards;
- demonstrated business acumen, experience and ability to exercise sound judgments in matters that relate to the current and long-term objectives of our company;
- strong finance experience;
- commitment to understand our company and its industry;
- interest and ability to understand the sometimes conflicting interests of the various constituencies of our company, which include stockholders, employees, customers, governmental units, creditors and the general public, and to act in the interests of all stockholders;

- diversity of expertise and experience in substantive matters pertaining to our business relative to other board members:
- diversity of background and perspective, including with respect to age, gender, race, place of residence and specialized experience; and
- practical and mature business judgment, including the ability to make independent analytical inquiries.

The nominating and corporate governance committee's goal is to assemble a board of directors that brings to the company a variety of perspectives and skills derived from high quality business and professional experience. Moreover, the nominating and corporate governance committee believes that the background and qualifications of the board of directors, considered as a group, should provide a significant mix of experience, knowledge and abilities that will allow the board of directors to fulfill its responsibilities. Nominees are not discriminated against on the basis of race, religion, national origin, sex, sexual orientation, disability or any other basis proscribed by law.

The nominating and corporate governance committee has not adopted a formal policy with respect to a fixed set of specific minimum qualifications, including diversity, for its candidates for membership on the board of directors. The committee may consider such other facts, including, without limitation, diversity, as it may deem are in the best interests of our company and its stockholders. Our directors' performance and qualification criteria are reviewed periodically by the nominating and corporate governance committee.

## Identification and Evaluation of Nominees for Directors

The nominating and corporate governance committee identifies nominees for director by first evaluating the current members of our board of directors willing to continue in service. Current members with qualifications and skills that are consistent with the nominating and corporate governance committee's criteria for board of director service and who are willing to continue in service are considered for re-nomination, balancing the value of continuity of service by existing members of our board of directors with that of obtaining a new perspective or expertise.

If any member of our board of directors does not wish to continue in service or if our board of directors decides not to re-nominate a member for re-election, the nominating and corporate governance committee identifies a new nominee that meets the criteria above. The committee generally inquires of our board of directors and members of management for their recommendations. The committee may also review the composition and qualification of the boards of directors of our competitors, and may seek input from industry experts or analysts. The nominating and corporate governance committee reviews the qualifications, experience and background of candidates. Final candidates, if other than our current directors, would be interviewed by the members of the nominating and corporate governance committee and by certain of our other independent directors and executive management. In making its determinations, the nominating and corporate governance committee evaluates each individual in the context of our board of directors as a whole, with the objective of assembling a group that can best contribute to the success of our company and represent stockholder interests through the exercise of sound judgment. After review and deliberation of all feedback and data, the nominating and corporate governance committee makes its recommendation to our board of directors. To date, the nominating and corporate governance committee has not utilized third-party search firms to identify board of director candidates. The nominating and corporate governance committee may in the future choose to do so in those situations where particular qualifications are required or where existing contacts are not sufficient to identify an appropriate candidate.

At the Annual Meeting, stockholders will be asked to consider the election of Mr. Clark, who has been nominated for election as director for the first time. During 2016, Mr. Clark was appointed by our Board as a new

director. Mr. Clark was originally proposed to the nominating and corporate governance committee by an executive officer and our board determined to include him among its nominees.

Stockholders may recommend individuals to our nominating and corporate governance committee for consideration as potential director candidates by submitting their names, together with appropriate biographical information and background materials and a statement as to whether the stockholder or group of stockholders making the recommendation has beneficially owned more than 5% of our common stock for at least a year as of the date such recommendation is made, to Nominating and Corporate Governance Committee, c/o Corporate Secretary, Agios Pharmaceuticals, Inc. 88 Sidney Street, Cambridge, Massachusetts 02139. Assuming that appropriate biographical and background material has been provided on or before the dates set forth in the section below entitled "Stockholder Proposals," the committee will evaluate stockholder-recommended candidates by following substantially the same process, and applying substantially the same criteria, as it follows for candidates submitted by others.

#### **Communications with Our Board of Directors**

Our Board will give appropriate attention to written communications that are submitted by stockholders, and will respond if and as appropriate. The chairman of the board of directors (if an independent director), or the lead director (if one is appointed), or otherwise the chair of our Nominating and Governance Committee, with the assistance of our Corporate Secretary or his or her designee, is primarily responsible for monitoring communications from stockholders and for providing copies or summaries to the other directors as he or she considers appropriate.

Communications are forwarded to all directors if they relate to important substantive matters and include suggestions or comments that the chairman of the board considers to be important for the directors to know. In general, communications relating to corporate governance and corporate strategy are more likely to be forwarded than communications relating to ordinary business affairs, personal grievances and matters as to which we receive repetitive or duplicative communications.

Stockholders who wish to send communications on any topic to our board of directors should address such communications to Agios Pharmaceuticals, Inc., c/o Corporate Secretary, 88 Sidney Street, Cambridge, MA 02139.

## **Board Meetings and Attendance**

Our board of directors met five times during our fiscal year 2016, including telephonic meetings. During the year, each of our directors attended 75% or more of the aggregate number of meetings of the board of directors and the committees on which they served, other than Mr. Nelsen, who attended 73% of the aggregate number of meetings of the board of directors and the committees on which he served.

#### **Director Attendance at Annual Meetings**

Although our company does not have a formal policy regarding attendance by members of our board of directors at our annual meeting, we encourage all of our directors to attend. Seven of our nine then-serving directors attended our 2016 annual meeting of stockholders.

#### **Board Committees**

We have four standing committees: the audit committee, the compensation committee, the nominating and corporate governance committee and the science and technology committee. Each of these committees has a written charter approved by our board of directors. A copy of each charter can be found under the "Investors—Financials" section of our website at *www.agios.com*.

#### Audit Committee

The members of our audit committee are Mr. Clancy, Dr. Ho and Dr. Maraganore. Mr. Clancy is the chair of the audit committee. Our board of directors has determined that Mr. Clancy and Ms. Ho qualify as audit committee financial experts within the meaning of SEC regulations and the NASDAQ Listing Rules. In making this determination, our board has considered the formal education and nature and scope of his or her previous experience, coupled with past and present service on various audit committees. Our audit committee assists our board of directors in its oversight of our accounting and financial reporting process and the audits of our financial statements. The audit committee met eight times during fiscal year 2016, including telephonic meetings. The audit committee's responsibilities include:

- appointing, approving the compensation of, and assessing the independence of our registered public accounting firm;
- overseeing the work of our registered public accounting firm, including through the receipt and consideration of reports from such firm;
- reviewing and discussing with management and the registered public accounting firm our annual and quarterly financial statements and related disclosures;
- recommending to our board whether the audited financial statements should be included in our annual report;
- monitoring our internal control over financial reporting, disclosure controls and procedures and code of business conduct and ethics:
- overseeing our internal audit function;
- discussing our risk management policies;
- establishing policies regarding hiring employees from the registered public accounting firm and procedures for the receipt, retention and treatment of accounting related complaints and concerns;
- meeting independently with our internal auditing staff, registered public accounting firm and management;
- reviewing and approving or ratifying any related person transactions; and
- preparing the audit committee report required by SEC rules, which is included on page 30 of this Proxy Statement.

# Compensation Committee

The members of our compensation committee are Ms. Foster, Dr. Maraganore and Mr. Nelsen. Ms. Foster is the chair of the compensation committee. Our compensation committee assists our board of directors in the discharge of its responsibilities relating to the compensation of our executive officers. The compensation committee met six times during fiscal year 2016. The compensation committee's responsibilities include:

reviewing and approving corporate goals and objectives relevant to CEO compensation;

- making recommendations to our board with respect to the compensation of our chief executive officer, and reviewing and approving the compensation of our other executive officers;
- overseeing an evaluation of our senior executives;
- overseeing and administering our cash and equity incentive plans;
- reviewing and making recommendations to our board with respect to director compensation;
- · reviewing and discussing with management our "Compensation Discussion and Analysis"; and
- preparing the compensation committee report required by SEC rules, which is included on page 59 of this Proxy Statement.

Nominating and Corporate Governance Committee

The members of our nominating and corporate governance committee are Ms. Foster, Mr. Clark and Dr. Ho. Ms. Foster is the chair of the nominating and corporate governance committee. The nominating and corporate governance committee met three times during fiscal year 2016. The nominating and corporate governance committee's responsibilities include:

- identifying individuals qualified to become board members;
- recommending to our board the persons to be nominated for election as directors and to each committee of our board of directors:
- reviewing and making recommendations to the board with respect to management succession planning;
- developing and recommending corporate governance principles to the board; and
- overseeing periodic evaluations of the board.

The processes and procedures followed by our nominating and corporate governance committee in identifying and evaluating director candidates are described above under the heading "Director Nomination Process".

# Science and Technology Committee

The only current member of our science and technology committee is Dr. Cantley, who is also the chair of the committee. Prior to his resignation from our board in August 2016, Dr. Mark Tessier-Lavigne was also a member and chair of the committee. The science and technology committee assists our board's oversight of our research and development activities. The science and technology committee met four times during fiscal year 2016, including telephonic meetings. The committee's responsibilities include:

- reviewing, evaluating, and advising our board and management regarding our long-term strategic goals and objectives and the quality and direction of our research and development programs;
- monitoring and evaluating trends in research and development, and recommending to our board and management emerging technologies for building the company's technological strength;

- recommending approaches to acquiring and maintaining technology positions (including but not limited to contracts, grants, collaborative efforts, alliances, and capital);
- advising our board and management on the scientific aspects of business development transactions;
- regularly reviewing the company's research and development pipeline;
- assisting our board with its oversight responsibility for enterprise risk management in areas
  affecting the company's research and development; and
- reviewing such other topics as delegated to the science and technology committee from time to time by our board.

### The Board's Role in Risk Oversight

Our board of directors has responsibility for the oversight of the company's risk management processes and, either as a whole or through its committees, regularly discusses with management our major risk exposures, the potential impact of these risks on our business and the steps we take to manage them. The risk oversight process includes receiving regular reports from board committees and members of senior management to enable our board to understand the company's risk identification, risk management and risk mitigation strategies with respect to areas of potential material risk, including operations, finance, legal, regulatory, strategic and reputational risk.

The audit committee reviews information regarding liquidity and operations, and oversees our management of financial risks. Periodically, the audit committee reviews our policies with respect to risk assessment, risk management, loss prevention and regulatory compliance. Oversight by the audit committee includes direct communication with our external auditors, and discussions with management regarding significant risk exposures and the actions management has taken to limit, monitor or control such exposures. The compensation committee is responsible for assessing whether any of our compensation policies or programs has the potential to encourage excessive risk-taking. The nominating and corporate governance committee manages risks associated with the independence of the board, corporate disclosure practices, and potential conflicts of interest. The science and technology committee assists the Board's oversight of the Company's research and development activities. While each committee is responsible for evaluating certain risks and overseeing the management of such risks, the entire board is regularly informed through committee reports about such risks. Matters of significant strategic risk are considered by our board as a whole.

# **Risk Considerations in our Compensation Program**

We along with our compensation committee of our board of directors have reviewed the compensation policies and practices for all of our employees and believe any risks arising from our compensation policies and programs are not reasonably likely to have a material adverse effect on our company or its operations. In reaching this conclusion, the compensation committee and we considered several factors, including the following:

- the establishment of base salaries consistent with our executive officers' responsibilities and market comparable companies to ensure that our executive officers would not be motivated to take excessive risks to achieve a reasonable level of financial security;
- the mix between fixed and variable, annual and long-term, and cash and equity compensation, which is intended to encourage strategies and actions that are in our company's long-term best interests;

- vesting periods for equity compensation awards that reward sustained stock price appreciation;
- the evaluation of company performance (which drives the amount of cash and number of shares available for grant under our contingent annual performance-based cash incentive and annual equity incentive programs, respectively) based on a variety of long- and short-term objectives in which no single objective is given substantial weight, thus diversifying the risk associated with any single indicator of performance; and
- the discretion available to our compensation committee not to apply fixed formulae in assessing our company performance, thus enabling the compensation committee to, among other things, (a) eliminate the potential incentive for management to conduct activities that are in the company's annual goals, but which may not, due to new data or other inputs, ultimately prove to be in the best interest of stockholders, and (b) reward management for making decisions that are in the long-term best interest of our product development programs, even when those decisions result in the failure to meet short-term objectives.

## **Director Compensation**

Our board of directors has adopted a non-employee director compensation policy that is designed to provide a total compensation package that enables us to attract and retain, on a long-term basis, high caliber non-employee directors. The cash and equity compensation paid to non-employee directors under the policy, effective January 1, 2016, is set forth in the table below.

	Annual Cash Compensation	Number of Options Granted
<b>Board of Directors:</b>		
Board Member	\$40,000	16,000 upon initial election; 8,000 at each annual meeting of stockholders
Chair	Additional \$30,000	_
<b>Audit Committee:</b>		
Chair	\$15,000	1,000 shares at each annual meeting of stockholders
Member	\$10,000	_
<b>Compensation Committee:</b>		
Chair	\$10,000	500 shares at each annual meeting of stockholders
Member	\$7,500	<del>-</del>
Nominating and Corporate Governance Committee:		
Chair	\$7,000	500 shares at each annual meeting of stockholders
Member	\$5,000	_
Science and Technology Committee:		
Chair	\$10,000	500 shares at each annual meeting of stockholders
Member	\$7,500	_

Under the policy, non-employee members of our board of directors also are reimbursed for travel, lodging and other reasonable expenses incurred in attending board of directors or committee meetings.

The stock options granted to our non-employee directors have an exercise price equal to the fair market value of our common stock on the date of grant, expire ten years after the date of grant, and are subject to vesting based upon a director's continued service on our board. The initial stock options granted to our newly elected non-employee directors vest with respect to 25% of the shares on the first anniversary of the grant date and monthly thereafter until the fourth anniversary of the date of grant. The annual stock options granted to our non-employee directors vest with respect to 100% of the shares on the first anniversary of the grant date. To the extent that a non-employee director has other responsibilities, such director may receive additional compensation to the extent deemed necessary by our board of directors. Directors who also are employees do not receive cash or equity compensation for service on the board of directors in addition to compensation payable for their service as employees.

The following table sets forth information concerning the compensation for our non-employee directors during the fiscal year ended December 31, 2016:

Name	 es Earned or d in Cash (\$)	Opti	ion Awards (\$)(1)	,	Total (\$)	Number of Shares Subject to Option Awards Held as of December 31, 2016
Lewis C. Cantley, Ph.D.	\$ 48,125	\$	234,837(2)	\$	282,962	176,579
Paul J. Clancy	\$ 55,000	\$	264,192(3)	\$	319,192	58,400
Ian T. Clark (4)	\$ _	\$	457,767(7)	\$	457,767	16,000
Douglas G. Cole, M.D. (5)	\$ 50,000	\$	234,837(2)	\$	284,837	31,125
Kaye Foster	\$ 57,000	\$	264,192(6)	\$	321,192	45,899
Maykin Ho, Ph.D.	\$ 50,000	\$	234,837(2)	\$	284,837	29,250
Perry Karsen (8)	\$ _	\$		\$	_	_
John M. Maraganore, Ph.D.	\$ 67,500	\$	234,837(2)	\$	302,337	41,125
Robert T. Nelsen	\$ 47,500	\$	234,837(2)	\$	282,337	31,125
Marc Tessier-Lavigne, Ph.D. (9)	\$ 53,333	\$	249,514(10)	\$	302,848	48,875

- (1) Amounts listed represent the aggregate fair value amount computed as of the grant date of the option awards granted during 2016 in accordance with FASB ASC Topic 718. Assumptions used in the calculation of these amounts are included in Note 8, Share-Based Payments, of the Notes to our Consolidated Financial Statements filed on our Annual Report on Form 10-K, filed with the SEC on February 16, 2017.
- (2) Represents options to purchase 8,000 shares of common stock granted during 2016 for service on our board of directors. The shares subject to these options vest in full on June 20, 2017.
- (3) Represents options to purchase 9,000 shares of common stock granted to Mr. Clancy during 2016 for service on our board of directors and as chair of the audit committee. The shares subject to this option vest in full on June 20, 2017.
- (4) Mr. Clark joined our board of directors effective December 30, 2016.
- (5) Dr. Cole resigned from our board of directors effective January 2, 2017.
- (6) Represents options to purchase 9,000 shares of common stock granted to Ms. Foster during 2016 for service on our board of directors and as chair of the compensation and the nominating and corporate governance committees. The shares subject to this option vest in full on June 20, 2017.

- (7) Represents options to purchase 16,000 shares of common stock granted to Mr. Clark during 2016 upon his initial election to the board of directors, of which 25% will vest on December 29, 2017, with the remaining shares vesting monthly thereafter in equal increments over 36 months.
- (8) Mr. Karsen resigned from our board of directors effective March 1, 2016 and did not receive compensation for his service on the board of directors during 2016.
- (9) Dr. Tessier-Lavigne served as the chairman of the board and the chair of the science and technology committee until his resignation, effective August 26, 2016.
- (10) Represents options to purchase 8,500 shares of common stock granted Dr. Tessier-Lavigne during 2016 for service on our board of directors and as chair of science and technology committee. The shares subject to this option vest in full on June 20, 2017.

Dr. Schenkein, one of our directors who also serves as our president and chief executive officer, does not receive any additional compensation for his service as a director.

# Limitation of Liability and Indemnification

Our certificate of incorporation limits the personal liability of directors for breach of fiduciary duty to the maximum extent permitted by the Delaware General Corporation Law and provides that no director will have personal liability to us or to our stockholders for monetary damages for breach of fiduciary duty or other duty as a director. However, these provisions do not eliminate or limit the liability of any of our directors:

- for any breach of the director's duty of loyalty to us or our stockholders;
- for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law;
- for voting or assenting to unlawful payments of dividends, stock repurchases or other distributions; or
- for any transaction from which the director derived an improper personal benefit.

Any amendment to or repeal of these provisions will not eliminate or reduce the effect of these provisions in respect of any act, omission or claim that occurred or arose prior to such amendment or repeal. If the Delaware General Corporation Law is amended to provide for further limitations on the personal liability of directors of corporations, then the personal liability of our directors will be further limited to the greatest extent permitted by the Delaware General Corporation Law.

In addition, our certificate of incorporation provides that we must indemnify our directors and officers and we must advance expenses, including attorneys' fees, to our directors and officers in connection with legal proceedings, subject to very limited exceptions.

We maintain a general liability insurance policy that covers certain liabilities of our directors and officers arising out of claims based on acts or omissions in their capacities as directors or officers. In addition, we have entered into indemnification agreements with our directors and executive officers. These indemnification agreements require us, among other things, to indemnify each such director and executive officer for some expenses, including attorneys' fees, judgments, fines and settlement amounts incurred by him in any action or proceeding arising out of his service as one of our directors or executive officers.

Certain of our non-employee directors may, through their relationships with their employers, be insured and/or indemnified against certain liabilities incurred in their capacity as members of our board of directors.

Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended, or the Securities Act, may be permitted to directors, executive officers or persons controlling us, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

#### **Executive and Director Compensation Processes**

The compensation committee generally meets at least four times 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 or the vice president of human resources. 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 of our books, records, facilities and personnel, as well as authority to obtain, at our expense, 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 fiscal year ended December 31, 2016, the compensation committee directly engaged Radford, a compensation consultant that is affiliated with AON Hewitt company, to advise the compensation committee on our compensation program, which includes base salaries, annual performance-based cash incentives and equity incentive awards. Radford did not determine or make recommendations to the compensation committee regarding the specific amount or form of compensation of our executive officers or directors for fiscal year ended December 31, 2016.

Historically, the compensation committee has made (or has recommended that the independent members of the Board make) 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 and the first quarter of the following 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 our compensation strategy, potential modifications to that strategy and new trends, plans or approaches to compensation, at various meetings throughout the year. The compensation committee is responsible for making determinations regarding compensation of our executive officers other than our chief executive officer, making changes to pre-approved salary ranges, salary increases, equity awards, incentive payments and pre-approved equity ranges for new hires and high performers, the initiation of offerings under our 2013 employee stock purchase plan and making material changes to benefits offered to our employees. In addition, the compensation committee makes recommendations to our board of directors regarding the compensation of directors and the chief executive officer, and the determination of the size of annual "evergreen" increases to the number of shares reserved under our 2013 stock incentive plan and 2013 employee stock purchase plan.

Under its charter, the compensation committee may form, and delegate authority to, subcommittees, consisting of independent directors, as it deems appropriate. During fiscal year 2016, the compensation committee did not form or delegate authority to such subcommittees. During fiscal year 2016, the compensation

committee delegated to the chief executive officer, or if the chief executive officer was unavailable, other members of senior management, decision-making authority related to initial salary levels and salary adjustments, incentive payments and option grants for all non-executive officers, and non-material changes to employee benefits. Such delegated decision-making is governed by guidelines established by the compensation committee.

## Report of the Audit Committee of the Board of Directors

The audit committee oversees the Company's financial reporting process on behalf of the board of directors. We have reviewed the Company's audited consolidated financial statements for the fiscal year ended December 31, 2016 and discussed them with Company management and Ernst & Young LLP, the Company's independent registered public accounting firm.

We have received from, and discussed with, Ernst & Young LLP, which is responsible for expressing an opinion on the conformity of the Company's audited consolidated financial statements with accounting principles generally accepted in the United States, its judgments as to the quality, not just the acceptability, of the Company's accounting principles and such other matters as are required to be discussed with the audit committee under generally accepted auditing standards, including the matters required to be discussed by Statement on Auditing Standard No. 16, Communication with Audit Committees, as adopted by the Public Company Accounting Oversight Board (the "PCAOB"). In addition, we have received from Ernst & Young LLP the written disclosures and the letter required by applicable requirements of the PCAOB regarding its communications with us concerning independence, have considered the compatibility of non-audit services with the auditors' independence and have discussed with Ernst & Young LLP its independence from management and the Company.

Based on the review and discussions referred to above, we recommended to the board of directors that the audited consolidated financial statements be included in the Company's Annual Report on Form 10-K for the year ended December 31, 2016.

This report of the audit committee is not "soliciting material," shall not be deemed "filed" with the SEC and shall not be incorporated by reference by any general statement incorporating by reference this Proxy Statement into any filing under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing, except to the extent that we specifically incorporate this information by reference, and shall not otherwise be deemed filed under such acts.

The foregoing report has been furnished by the audit committee.

Respectfully submitted,

The Audit Committee of the Board of Directors

Paul J. Clancy (chair) Maykin Ho John M. Maraganore

#### **Independent Registered Public Accountants, Fees and Other Matters**

Ernst & Young LLP, independent registered public accountants, audited our financial statements for the fiscal year ended December 31, 2016. Representatives of Ernst & Young LLP are expected to be present at the Annual Meeting. They will have an opportunity to make a statement if they so desire, and will also be available to respond to appropriate questions from stockholders.

The following table represents aggregate fees billed to us for services related to the fiscal years ended December 31, 2016 and 2015, by Ernst & Young LLP.

	Year Ended December 31,			
		2016		2015
Audit Fees(1)	\$	1,004,966	\$	1,098,340
Audit Related Fees(2)				
Tax Fees(3)		37,000		33,300
All Other Fees(4)		1,995		1,995
Total	\$	1,083,961	\$	1,133,635

- (1) Audit fees consist of fees billed for professional services performed by Ernst & Young LLP for the audit of our annual consolidated financial statements, the review of interim consolidated financial statements, and related services that are normally provided in connection with registration statements.
- (2) Audit related fees consist of fees billed by Ernst & Young LLP for assurance and related services that are reasonably related to the performance of the audit or review of our consolidated financial statements. There were no such fees incurred in 2016 or 2015.
- (3) Tax fees consist of fees for professional services, including tax consulting and compliance performed by Ernst & Young LLP.
- (4) All other fees consist of database subscription fees paid to Ernst & Young LLP.

The audit committee has considered whether the provision of non-audit services is compatible with maintaining the independence of Ernst & Young LLP, and has concluded that the provision of such services is compatible with maintaining such independence.

## **Pre-Approval Policies and Procedures**

Our audit committee has adopted policies and procedures relating to the approval of all audit and non-audit services that are to be performed by our registered public accounting firm. This policy generally provides that we will not engage our registered public accounting firm to render audit or non-audit services unless the service is specifically approved in advance by our audit committee or the engagement is entered into pursuant to one of the pre-approval procedures described below.

From time to time, our audit committee may pre-approve specified types of services that are expected to be provided to us by our registered public accounting firm during the next 12 months. Any such pre-approval is detailed as to the particular service or type of services to be provided and is also generally subject to a maximum dollar amount.

Our audit committee may also delegate to one or more subcommittees or an individual member of our audit committee the authority to approve any audit or non-audit services to be provided to us by our registered public accounting firm. Any approval of services by a subcommittee or member of our audit committee pursuant to this delegated authority is reported on at the next meeting of our audit committee. During 2016, all of the services provided by Ernst & Young LLP were pre-approved by our audit committee.

#### **EXECUTIVE OFFICERS**

The following table sets forth information regarding our executive officers as of April 21, 2017:

Name	Age	Position(s)
David P. Schenkein, M.D.	59	President and Chief Executive Officer
Scott Biller, Ph.D.	61	Chief Scientific Officer
Chris Bowden, M.D.	56	Chief Medical Officer
Andrew Hirsch	46	Chief Financial Officer
Steve Hoerter	46	Chief Commercial Officer

The biography of David P. Schenkein, M.D. can be found under "Nominees for Election to the Board of Directors."

Scott Biller, Ph.D. joined Agios in September 2010 as chief scientific officer, with more than 25 years of drug discovery and development experience. From 2003 to September 2010, Dr. Biller was vice president and head of global discovery chemistry at the Novartis Institutes for Biomedical Research, an affiliate of publicly-traded biopharmaceutical company Novartis AG. Prior to that, Dr. Biller held the positions of vice president, pharmaceutical candidate optimization at the BMS Pharmaceutical Research Institute, a division of Bristol-Myers Squibb Company, or BMS, a global biopharmaceutical company, and executive director of drug discovery chemistry for the BMS research site in Lawrenceville, New Jersey. Among his other key leadership positions at BMS, Dr. Biller was the executive director of metabolic diseases chemistry. He contributed to the drug candidate pipelines at both BMS and Novartis, culminating in two medicines launched worldwide (Onglyza® for the treatment of Type 2 diabetes and Juxtapid® for familial hypercholesterolemia) and three additional drugs reaching phase 3 clinical development. Dr. Biller earned a S.B. in chemistry at MIT, a Ph.D. in organic chemistry at Caltech and was an NIH Postdoctoral Fellow at Columbia University focusing on natural product synthesis.

Chris Bowden, M.D. joined Agios as chief medical officer in May 2014. He has more than 19 years of experience in clinical drug development, including the approval of several cancer medicines. Prior to joining Agios, Dr. Bowden was vice president product development oncology, franchise lead (Signaling Group) at Genentech. During Dr. Bowden's eight years at Genentech, he was responsible for the successful development of a number of novel targeted oncology medicines, including Zelboraf® for patients with BRAF V600E positive melanoma and Tarceva® for patients with EGFr activating mutation positive, non-small cell lung cancer. From 2003 to 2006, Dr. Bowden was the executive director for EMEA (Europe, Middle East, Africa) regions for BMS. In this role, he led medical affairs strategies for cancer, immunology and pain medicines. Earlier, Dr. Bowden held positions of increasing responsibility in oncology clinical development, Phases I-III at Pharmacia Corporation and Janssen Pharmaceutical, Inc., each of which is a pharmaceutical company. Prior to his industry experience, Dr. Bowden was on the oncology faculty at the University of Virginia Health Science Center where he participated in numerous industry and cooperative group trials. Dr. Bowden received his M.D. from Hahnemann University School of Medicine in Philadelphia followed by internal medicine training at Roger Williams Medical Center and the Providence VA Medical Center, Rhode Island. He completed his medical oncology fellowship at the National Cancer Institute Medicine Branch. Dr. Bowden is board certified in internal medicine and medical oncology.

Andrew Hirsch joined Agios as chief financial officer in September 2016. He has more than 20 years of experience in a range of strategic and operating roles in the biotech sector, most recently having served as president and chief executive officer of BIND Therapeutics, Inc., a biotechnology company, from March 2015 until August 2016. Prior to being named president and chief executive officer at BIND, Mr. Hirsch held several other leadership positions at the company, including chief operating officer from February 2014 to March 2015, and chief financial officer from July 2012 to March 2015. Prior to joining BIND, Mr. Hirsch was chief financial officer at Avila Therapeutics, Inc., a biotechnology company, from June 2011 until its acquisition by Celgene

Corporation in March 2012. From 2002 to 2011 Mr. Hirsch held roles of increasing responsibility at Biogen Idec, a biotechnology company, including vice president of Corporate Strategy and M&A and program executive for the Tecfidera development team. He holds an M.B.A. from the Tuck School at Dartmouth College and a B.A. in Economics from the University of Pennsylvania.

Steve Hoerter joined Agios as chief commercial officer in February 2016. He has more than 20 years of global pharmaceutical and biotechnology experience, most recently having served, from August 2011 to February 2016, as executive vice president and chief commercial officer at Clovis Oncology, Inc., a biopharmaceutical company. There, Mr. Hoerter built and led the global commercial organization that developed go-to-market strategies for two oncology therapies. Before joining Clovis in August 2011, he was general manager and management center head at Roche Group for the Sub-Saharan Africa and Indian Ocean Region. From 2005 to 2010, Mr. Hoerter held a variety of positions at Genentech, including serving on the senior leadership team for Genentech's bio-oncology business as senior director, pipeline development and commercial operations. Prior to that, Mr. Hoerter held commercial roles at Chiron Corporation and Eli Lilly and Company in the United States, Europe and Africa. Mr. Hoerter received his B.A. from Bucknell University, M.B.A. from Tilburg University and M.S. in management from Purdue University.

#### **EXECUTIVE COMPENSATION**

## **Compensation Discussion and Analysis**

Our compensation committee is responsible for reviewing and approving, or recommending for approval by the board of directors, the compensation of our named executive officers, including salary, cash and equity incentive compensation levels, severance arrangements, change in control benefits and other forms of executive compensation. This committee is also responsible for evaluating our company's performance against its goals and making related recommendations to our board, assessing the performance of our named executive officers, and ensuring our compensation program is aligned with the objectives described below and competitive with those of other companies in our industry that compete with us for talent. This section discusses the principles underlying our compensation committee's policies and decisions with respect to the compensation of our named executive officers.

Our named executive officers for 2016 were as follows:

- David P. Schenkein, M.D., our president and chief executive officer;
- Scott Biller, Ph.D., our chief scientific officer;
- Christopher Bowden, M.D., our chief medical officer;
- Andrew Hirsch, our chief financial officer;
- Steve Hoerter, our chief commercial officer; and
- Glenn Goddard, our former senior vice president, finance.

Say-on-Pay Vote Results

At our 2016 annual meeting of stockholders, we conducted our first non-binding advisory vote on the compensation of our named executive officers, commonly referred to as a "say-on-pay" vote, in accordance with the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010. Over 87% of the votes cast by stockholders on this proposal were cast in support of the compensation paid to our named executive officers. While this vote is a non-binding advisory vote, our compensation committee and board of directors take the voting results into account in determining the compensation of our named executive officers. Given the strong level of support evidenced by last year's say-on-pay vote, our compensation committee decided to maintain our general approach to executive compensation and made no significant changes to our executive compensation program this year.

Our compensation committee and board of directors will continue to consider stockholder input and monitor our executive compensation program to ensure it aligns the interests of our executive officers with the interests of our stockholders and adequately addresses any stockholder concerns that may be expressed in future votes. Consistent with the recommendation of our board of directors and the preference of our stockholders as reflected in the non-binding advisory vote on the frequency of future "say-on-pay" votes conducted at our 2016 annual meeting of stockholders, our stockholders will have an opportunity annually to cast an advisory vote in connection with compensation for our named executive officers.

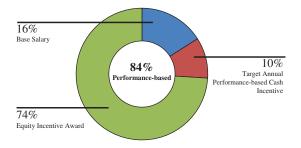
#### Executive Summary

Agios made significant progress on a number of fronts in 2016. As we continued the late-stage clinical development of two of our IDH mutant inhibitors, enasidenib and ivosidenib, we completed the enrollment of the phase 2 expansion cohort for the phase 1/2 study of enasidenib in patients with IDH2 mutant-positive relapsed or refractory, or R/R, acute myeloid leukemia, or AML, and submitted a new drug application, or NDA, for enasidenib in IDH2 mutant-positive R/R AML, both in collaboration with our partner Celgene Corporation, or Celgene. We continued to enroll the expansion arm of our ongoing phase 1 trial of ivosidenib in patients with IDH1 mutant-positive R/R AML and initiated ClarIDHy, a global, registration-enabling randomized phase 3 study of ivosidenib in IDH1 mutant-positive advanced cholangiocarcinoma. We also initiated a phase 1/2 frontline combination study of enasidenib or ivosidenib with VIDAZA® in newly diagnosed AML patients with an IDH mutation who are not eligible for intensive chemotherapy, in collaboration with Celgene. Concurrently, we continued to drive enrollment in our other ongoing clinical trials of our IDH mutant inhibitors in hematologic and solid tumors. In our rare genetic diseases portfolio, we made great strides in the advancement of our PK activators. AG-348 achieved clear proof-of-concept in our phase 2 clinical trial, known as DRIVE PK, demonstrating sustained hemoglobin increases in patients with PK deficiency, and we selected AG-348 for pivotal development in PK deficiency.

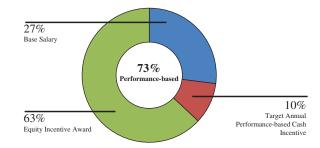
We also continued to expand and advance our research pipeline in the fields of both cancer metabolism and rare genetic diseases and selected a development candidate targeting methylthioadenosine phosphorylase, or MTAP, deleted cancers, for further development. We also expanded into our third area of research, metabolic immuno-oncology, an emerging field of cancer research focused on altering the metabolic state of immune cells to enhance the body's immune response to cancer, and entered into a new global strategic collaboration with Celgene focused on this area. Finally, we completed an underwritten public offering of common stock, resulting in gross proceeds of approximately \$173 million, significantly strengthening our balance sheet. Based on our achievements in 2016, the compensation committee determined and the board approved that we met all of our company goals for 2016 (100% of target) as a whole.

We have a strong executive team and, in order to foster future success of the company, we reward our executives in a manner that reinforces our pay-for-performance philosophy and culture. Consistent with our pay-for-performance philosophy and our achievement of our company-wide performance goals, the majority of total compensation (base salary, annual performance-based cash incentives and equity incentive awards) our named executive officers received was performance-based in 2016, as shown in the charts below. The chart below titled "Other Named Executive Officers 2016 Target Compensation Mix (Average)" excludes the compensation of Mr. Hirsch and Mr. Hoerter, both of whom joined the company during 2016.

**CEO 2016 Target Compensation Mix** 



Other Named Executive Officers 2016 Target Compensation Mix (Average)



We have developed our executive compensation program to align with current governance and best practices while being able to achieve our stated objectives and philosophy and support our ambitious business goals:

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- ✓ Maintain an industry-specific peer group for benchmarking pay
- ✓ Target pay based on market norms
- ✓ Deliver executive compensation primarily through performance-based pay
- ✓ Set challenging short- and long-term incentive award goals
- ✓ Cap annual cash incentive payouts for our executives at 150% of the target payout level
- ✓ Maintain a clawback policy for equity and incentive compensation
- ✓ Require minimum levels of stock ownership by executives
- ✓ Offer market-competitive benefits for executives that are consistent with the rest of our employees
- ✓ Consult with an independent advisor on compensation levels and practices

## Compensation Objectives and Philosophy

## What We Don't Do

- × Allow hedging or pledging of equity
- × Re-price stock options
- × Provide perquisites
- Provide supplemental executive retirement plans

Our mission is to apply our scientific leadership in the field of cellular metabolism to transform the lives of patients with cancer and rare genetic diseases. Our compensation committee believes that the most effective compensation program is one that rewards value creation for stockholders and progress towards achieving our mission and that promotes company performance. The objectives of our compensation program are to:

- attract and retain superior executive officers and other employees with outstanding skills and values who contribute to our long-term success;
- provide incentives that motivate and reward the achievement of performance goals that directly correlate to the enhancement of stockholder value, as well as to facilitate executive retention; and
- align executives' interests with those of stockholders by rewarding the achievement of short- and long-term strategic and financial goals, which we believe serves to enhance short- and long-term value creation for our stockholders.

To achieve its objectives, our compensation committee evaluates our executive compensation program with the goal of setting total compensation at levels that align with our culture, total rewards strategy, size and life stage. Specifically, our compensation committee targets base salaries at the 50th percentile of our peer group, as discussed below, and seeks to ensure that such salaries reflect each executive's level of experience, performance and responsibility and that such levels are competitive with those of other companies in our industry and region that compete with us for executive talent. Our compensation program links a substantial portion of our named executive officers' compensation to the achievement of scientific, business, organizational and operational goals such as progress in our clinical trials and research programs; key research and development

achievements; maintaining the strong financial health of the company, including implementation of appropriate financing strategies; maintaining key strategic relationships; addition and development of internal competencies, including retention of high-performing employees; and achievement of desired financial metrics. Our compensation committee targets this annual performance-based cash incentive compensation at the 50th percentile of our peer group. In addition, we provide a significant portion of our executive compensation in the form of stock options that vest over time, which we believe helps to retain our executives and aligns their interests with those of our stockholders by allowing them to participate in the longer term success of our company as reflected in the appreciation of our stock price. We also grant our executives performance-based stock awards in limited circumstances, such as in connection with their start of employment. Our compensation committee considers a host of factors in comparison to the named peers when determining equity incentive compensation for our named executive officers, including annual long-term incentive values, annual equity awards expressed as a percent of total shares outstanding, total annual and cumulative dilution, the retentive value of outstanding awards and total equity ownership. Given the dynamic biopharmaceutical market, the compensation committee does not overemphasize any one perspective. Rather, the committee takes a holistic perspective, further considering the achievement of company goals and how that impacts total shareholder return, when determining actual award levels for the named executive officers, which the committee generally targets at the 75th percentile of our peer group. We believe that targeting overall compensation in this manner is necessary and appropriate in order to attract and retain the quality of talent we need to successfully grow our business, achieve our challenging goals, sustain strong performance, and differentiate ourselves from those companies against which we compete for talent. However, any given individual employee's compensation may vary from the targeted pay framework, based on the unique responsibilities and requirements of his or her position, his or her experience and other qualifications, internal parity relative to similar positions within the company, and individual or company performance relative to performance goals and the peer group to ensure appropriate pay-for-performance alignment. While we do not have a formal or informal policy for allocating between longterm and short-term compensation, between cash and non-cash compensation or among different forms of non-cash compensation, we generally strive to provide our named executive officers with a balance of short-term and long-term incentives to encourage consistently strong performance.

### Overview of Executive Compensation Process

As a part of determining named executive officer performance and compensation, our compensation committee receives recommendations from our chief executive officer (except with respect to his own compensation and performance). Our chief executive officer's performance is evaluated directly by the compensation committee and approved by the board. Evaluations of each of our named executives is based on our overall corporate performance against annual goals that are approved by the board of directors at the beginning of each year, as discussed in more detail below.

The compensation committee has the sole authority to retain, at our expense, one or more third-party compensation consultants to assist the compensation committee in performing its responsibilities. The compensation committee may terminate the services of the consultant if the compensation committee deems it appropriate. In 2016, the compensation committee utilized the services of Radford, an AON Hewitt company, to assist it in fulfilling its responsibilities. Radford was retained exclusively by the compensation committee and has not been retained by management to perform any work for the company other than projects performed at the direction of the compensation committee. Radford provides analysis and recommendations regarding:

- trends and emerging topics with respect to executive compensation;
- peer group selection for executive compensation benchmarking;
- compensation practices of our peer group, including executive severance arrangements;
- compensation philosophy and programs for executives and broad-based employees;

- · stock utilization and other metrics; and
- · board of directors compensation.

In addition, we subscribe to Radford's various global annual and specialized life sciences and general industry surveys on an ongoing basis. Radford advised the compensation committee on all of the principal aspects of executive compensation, including executive new hire compensation arrangements. Radford consultants attend meetings of the compensation committee, including executive sessions in which executive compensation issues are discussed, when requested to do so. Radford reports to the compensation committee and not to management, although it meets with management for purposes of gathering information for its analyses and recommendations. The compensation committee annually evaluates its engagement of compensation consultants, and selected Radford to advise with respect to compensation matters based on Radford's industry experience and reputation, which our compensation committee concluded give Radford useful context and knowledge to advise it. The compensation committee has assessed the independence of Radford pursuant to SEC and NASDAQ rules and concluded that no conflict of interest exists that would prevent Radford from independently representing the compensation committee.

Annual base salaries for the year, and annual performance-based cash incentives and equity incentive awards for all employees for the prior year are generally determined in the first quarter of the year based on company and individual performance of the prior year, as well as other factors, including compensation trends in the biopharmaceutical industry and among our benchmark peers. In February 2016, the compensation committee approved 2016 salaries, 2015 annual cash incentives and annual stock option awards for our named executive officers, except for the chief executive officer (payable in 2016). With respect to our chief executive officer, the compensation committee reviewed his performance and presented to the board its recommendations for his 2016 salary and 2015 annual cash incentives and annual stock option awards for approval; these recommendations were then considered and approved by the board. In February 2017, the compensation committee approved 2017 salaries, 2016 annual cash incentives and annual stock option awards for our named executive officers, except for the chief executive officer. With respect to our chief executive officer, the compensation committee reviewed his performance and presented to the board its recommendations for his 2017 salary and 2016 annual cash incentives and annual stock option awards for approval; these recommendations were then considered and approved by the board.

#### Defining and Comparing Compensation Benchmarks

The compensation committee benchmarks our executive compensation against a peer group of companies to determine competitiveness and market trends. The compensation committee reviews the companies in our peer group annually, reviews Radford's recommendations regarding which companies should be included in the peer group, and makes adjustments as necessary to ensure the peer group continues to properly reflect the market in which we compete for talented executives. The compensation committee also annually reviews the executive pay practices of other similarly-situated companies as reported by Radford through industry surveys and proxy analysis. These surveys are specific to the biopharmaceutical and biotechnology sector. We request customized reports of these surveys so that the compensation data reflect the practices of companies that are similar to us. The compensation committee considers this information when making determinations for each element of compensation.

In developing the peer group of companies to inform 2016 compensation decisions, our compensation committee, with the assistance of Radford, established a peer group of 17 publicly-traded, national and regional companies in the biopharmaceutical industry that was selected based on a balance of the following criteria:

• companies whose market capitalization, number of employees, maturity of product development pipeline and area of therapeutic focus are similar to ours;

- companies against which we believe we compete for executive talent; and
- public companies based in the United States whose compensation and financial data are available in proxy statements or other public documents.

Based on these criteria, our peer group for 2016 was comprised of the following companies:

ACADIA Pharmaceuticals, Inc. Incyte Corporation Portola Pharmaceuticals, Inc.

Alnylam Pharmaceuticals, Inc. Intercept Pharmaceuticals, Inc. PTC Therapeutics, Inc.

bluebird bio, Inc. Ionis Pharmaceuticals Inc. Puma Biotechnology Inc.

Celldex Therapeutics, Inc. Juno Therapeutics, Inc. Receptos, Inc.

Clovis Oncology, Inc. Neurocrine Biosciences, Inc. Seattle Genetics, Inc.

Dyax Corp. Novavax, Inc.

In evaluating the total compensation of our named executive officers for 2016, Radford also compared the total compensation of our executive leadership team to a broader biotechnology industry group, with a focus on companies with approximately 100 to 700 employees, a market capitalization between \$1.5 billion and \$14 billion and a lead product candidate in the mid- to late-stage of clinical development and a focus on oncology and/or orphan diseases.

The compensation committee believes the compensation practices of our peer group provide us with appropriate compensation benchmarks for evaluating the compensation of our named executive officers. Notwithstanding the similarities of the peer group to our company, due to the nature of our business, we compete for executive talent with many companies that are larger and more established than we are or that possess greater resources than we do, as well as with prestigious academic and non-profit institutions. Other considerations, including market factors, the experience level of the executive and the executive's performance against established corporate goals and individual objectives, may require that our compensation committee vary from its historic compensation practices or deviate from its general compensation philosophy under certain circumstances.

For the purposes of informing 2017 compensation decisions, the compensation committee, with the advice of Radford, examined the peer group list and, with reference to market capitalization, therapeutic area, stage of development, number of employees and other key business metrics, approved the following biopharmaceutical companies as our 2017 peer group:

ACADIA Pharmaceuticals, Inc. Juno Therapeutics, Inc. Puma Biotechnology Inc.

Acceleron Pharma, Inc.\* Kite Pharma, Inc.\* Seattle Genetics, Inc.

Alnylam Pharmaceuticals, Inc. Neurocrine Biosciences, Inc. Spark Therapeutics, Inc.\*

bluebird bio, Inc. Novavax, Inc. TESARO, Inc.\*

Intercept Pharmaceuticals, Inc. Ophthotech Corporation\* Ultragenyx Pharmaceutical

Inc.\*

Ionis Pharmaceuticals Inc. Portola Pharmaceuticals, Inc.

\*addition to 2017 peer group

The 2017 peer group represents a group of biopharmaceutical companies more similar to us in key measures than the list we used in 2016, in light of our substantial growth and clinical program advancement, focusing on companies with approximately 100 to 1,000 employees and a market capitalization between \$650 million and \$6 billion, and a focus on oncology and/or orphan diseases, with a mix of companies with a lead product candidate in the late-stage of clinical development and early commercial companies. Specifically, Celldex Therapeutics, Inc., Clovis Oncology, Inc., Dyax Corp., Incyte Corporation, PTC Therapeutics, Inc. and Receptos, Inc. were removed from the 2016 list either because they were acquired, their market values were below or above the targeted range, revenues were substantially above the targeted range or they suffered clinical development setbacks that affected their comparability at the time the peer group was reviewed. Acceleron Pharma, Inc., Kite Pharma, Inc., Ophthotech Corporation, Spark Therapeutics, Inc., TESARO, Inc., and Ultragenyx Pharmaceutical Inc. were added to the list.

# **Executive Compensation Elements**

The primary elements of our executive compensation program are:

- base salary;
- annual performance-based cash incentives;
- equity incentive awards;
- severance and change in control benefits;
- broad-based health and welfare benefits; and
- 401(k) plan.

Our compensation committee uses sound judgment to allocate long-term and short-term compensation for our named executive officers, in alignment with our pay-for-performance philosophy and the long-term interests

of shareholders. After reviewing information provided by our compensation consultant and other relevant data, our compensation committee exercises its judgment to determine what it believes to be the appropriate level and mix of the various compensation components. We generally strive to provide our named executive officers with a balance of short-term and long-term incentives to encourage consistently strong performance. Ultimately, the objective in allocating between long-term and currently paid compensation is to ensure adequate base compensation to attract and retain talent, while providing incentives to maximize long-term value for our company and our stockholders. Therefore, we provide cash compensation in the form of base salary to meet competitive salary norms and reward performance on an annual basis and in the form of incentive compensation to incent and reward performance based on specific annual goals. To further focus our executives on longer-term performance, we rely upon equity-based awards that vest over a meaningful period of time, thereby reinforcing stockholder value creation. In addition, we provide our executives with benefits that are available to all employees, including medical, vision and dental insurance; life and disability insurance; medical and dependent care flexible spending accounts; a 401(k) plan; and an opportunity to invest in our company pursuant to our employee stock purchase plan. Finally, we offer our executives severance benefits to incentivize them to continue to strive to achieve stockholder value in connection with change in control situations.

#### Base Salaries

Base salaries are used to recognize the experience, skills, knowledge and responsibilities required of our named executive officers. Base salaries for our named executive officers typically are established through arm's length negotiation at the time the named executive officer is hired, taking into account the position for which the named executive officer is being considered and the named executive officer's qualifications, prior experience and prior salary. None of our named executive officers is currently party to an employment agreement that provides for automatic or scheduled increases in base salary. However, on an annual basis, our compensation committee reviews and evaluates, with input from our chief executive officer, the need for adjustment of the base salaries of our named executive officers based on changes and expected changes in the scope of a named executive officer's responsibilities, including promotions, the individual contributions made by and performance of the named executive officer during the prior year, the named executive officer's performance over a period of years, overall labor market conditions, the relative ease or difficulty of replacing the executive with a wellqualified person, our overall growth and development as a company and general salary trends in our industry and among our peer group and where the named executive officer's salary falls in the salary range presented by that data. In making decisions regarding salary increases, we may also draw upon the experience of members of our board of directors with other companies. No formulaic base salary increases are provided to our named executive officers.

Based on a review of market data provided by Radford, the current compensation levels of our named executive officers and company performance and individual contributions, in February 2016, our compensation committee approved salary increases for Mr. Goddard and Drs. Biller and Bowden for 2016. With respect to our chief executive officer, the compensation committee reviewed his performance and presented to the board its recommendation for his 2016 salary, which recommendation was then considered and approved by the board. The 2016 base salaries of each of our named executive officers were:

	Base Salary	Base Salary	over 2015
David P. Schenkein, M.D.	\$ 517,500	\$ 568,000	9.8%(1)
Andrew Hirsch(2)	\$ —	\$ 440,000	_
Steve Hoerter(3)	\$ —	\$ 415,000	_
Scott Biller, Ph.D.	\$ 400,900	\$ 416,890	4.0%
Christopher Bowden, M.D.	\$ 403,800	\$ 436,091	8.0%(1)
Glenn Goddard(4)	\$ 318,300	\$ 327,818	3.0%

2015

2016

Of Imamagas

(1) Increase reflects merit-based and market-based adjustments.

- (2) Mr. Hirsch joined the company as our chief financial officer as of September 19, 2016.
- (3) Mr. Hoerter joined the company as our chief commercial officer as of February 16, 2016.
- (4) Mr. Goddard resigned as our senior vice president, finance effective as of November 2, 2016.

### Annual Performance-based Cash Incentives

We have designed our annual performance-based cash incentive program, which is guided by specified annual corporate and individual goals, to emphasize pay-for-performance and to reward our named executive officers for the achievement of our performance during the preceding year. The target pay opportunity of the annual cash incentive for the chief executive officer is determined by our board of directors, based upon the recommendation of our compensation committee, and the amount of the annual cash incentive for all other named executive officers is determined by our compensation committee. In making such determinations and recommendations, the compensation committee examined the totality of anticipated and unanticipated achievements by us and each named executive officer in the preceding year, including our performance against specific scientific, research, clinical, operational and financial company goals. In recent years, these annual company goals have primarily focused on the advancement of our lead programs.

Starting in fiscal year 2016, our compensation committee determined to formally cap annual cash incentive payouts for our executives in any given year at 150% of the target payout level, which is consistent with our past compensation practices and broader market practices for similarly situated companies.

Under our annual incentive program, cash incentive awards are determined by first establishing a cash incentive pool, which is then allocated among all eligible plan participants, and then multiplying that sum by a modifier recommended by our compensation committee and approved by our board of directors based on our performance as measured against the company's annual goals. Below is the list of the company's 2016 goals considered by our executive leadership team and compensation committee in their respective assessment of company performance against such 2016 goals:

- Advance the clinical development of our IDH mutant inhibitors in hematologic malignancies;
  - Complete single-arm expansion trials in R/R AML for both enasidenib and ivosidenib in the second half of 2016;
  - Initiate a global, registration-enabling phase 3 study of ivosidenib in frontline AML;
  - Initiate a phase 1/2 combination study of enasidenib or ivosidenib with VIDAZA® in newly diagnosed AML patients not eligible for intensive chemotherapy in the first quarter of 2016;
  - Continue to enroll patients in the phase 3 IDHENTIFY study of enasidenib;
  - Continue to enroll patients in the phase 1b combination study of enasidenib or ivosidenib with standard of care intensive chemotherapy in AML;
  - Continue to enroll patients in the phase 1 dose escalation and expansion study of AG-881 in hematologic malignancies;
- Prepare for U.S. launches of our two lead IDH mutant inhibitors, enasidenib and ivosidenib;

- Advance the clinical development of our IDH mutant inhibitors in solid tumors;
  - Initiate a randomized phase 2 study of ivosidenib in cholangiocarcinoma in the second half of 2016;
  - Continue to enroll patients in the phase 1 expansion study of ivosidenib in advanced solid tumors:
  - Continue to enroll patients in the phase 1 dose escalation and expansion study of AG-881 in solid tumors:
- Continue to drive our PKR activators to pivotal development;
  - Achieve proof of concept with DRIVE PK and present data in the first half of 2016;
  - Select AG-348 or AG-519 by the end of 2016 for pivotal development in 2017;
  - Outline clinical development plans for our PKR activators in beta-thalassemia in the second half of 2016;
- Expand our research and development pipeline;
  - Initiate preclinical development activities for the first molecule in our next wave of novel investigational medicines;
- Effectively scale the organization and strengthen our leadership for the future; and
- Continue to build our financial strength.

In December 2016, our chief executive officer recommended to our compensation committee that our company's performance against 2016 goals be assessed at a modifier of 100%, based on the following significant achievements in 2016:

- In collaboration with Celgene, completed the enrollment of the phase 2 expansion cohort for the phase 1/2 study of enasidenib in patients with IDH2 mutant-positive R/R AML and submitted an NDA for enasidenib in IDH2 mutant-positive R/R AML;
- Continued to enroll patients in the expansion arms of our phase 1 trial of ivosidenib in patients with IDH1 mutant-positive R/R AML to target a potential NDA submission for ivosidenib in IDH1 mutant-positive AML by the end of 2017; and reported data at a medical meetings in December 2016 showing durable molecular responses in patients with IDH1 mutant positive advanced hematological malignancies treated with ivosidenib;
- In collaboration with Celgene, initiated a phase 1/2 frontline combination study of enasidenib or ivosidenib with VIDAZA<sup>®</sup> in newly diagnosed AML patients not eligible for intensive chemotherapy;
- In collaboration with Celgene, continued to enroll patients in IDHENTIFY, a phase 3, multicenter, international, open-label trial of enasidenib designed to compare the efficacy and safety of enasidenib versus conventional care regimens in patients 60 years or older with IDH2 mutant-positive AML that is refractory to or relapsed after second- or third-line therapy;

- Continued to enroll patients in our phase 1b, multicenter, international, open label trial of enasidenib or ivosidenib in combination with induction and consolidation therapy in patients with newly diagnosed AML with an IDH mutation who are eligible for intensive chemotherapy designed to evaluate the safety and tolerability of enasidenib and ivosidenib in a frontline setting;
- Continued to enroll patients in our phase 1 clinical trial of AG-881 in patients with IDH1 or IDH2 mutant-positive hematological malignancies;
- Initiated ClarIDHy, a global, registration-enabling randomized phase 3 study of ivosidenib in IDH1 mutant-positive advanced cholangiocarcinoma;
- Continued to enroll patients in our phase 1 expansion study of ivosidenib in patients with IDH1
  mutant-positive advanced solid tumors and our phase 1 clinical trial of AG-881 in patients with
  IDH1 or IDH2 mutant-positive solid tumors;
- Achieved clear proof-of-concept for AG-348 in DRIVE PK, selected AG-348 for pivotal development in PK deficiency, and reported data from DRIVE PK at two major medical meetings in June and December 2016 showing rapid and sustained hemoglobin increases in adults with pyruvate kinase deficiency treated with AG-348;
- Continued to advance our research pipeline while selecting a development candidate targeting MTAP-deleted cancers;
- Continued to build our commercial organization in anticipation of product launches for enasidenib and ivosidenib:
- Continued to build our organization and expand internal capabilities consistent with our core values and culture; and
- Ended 2016 with a cash balance of approximately \$574 million, sufficient to meet our estimated cash needs until at least the end of 2018.

Based on the significant advances we made on our 2016 goals, and the overachievement on some goals balanced against the underachievement of others, the company performance multiplier for 2016 was set at 100% by our board of directors upon the recommendation of the compensation committee. Based on company and individual performance, our board of directors approved, upon the recommendation of the compensation committee, the 2016 cash incentive payment for our chief executive officer, and the compensation committee approved the 2016 cash incentive payouts for all other named executive officers as follows:

	Target Award of Base Salary	Cash Incentive Payment (\$)	2016 Actual Cash Incentive Payment (% of Target Award)
David P. Schenkein, M.D.	60%	340,800	100%
Andrew Hirsch	40%	176,000	100%(1)
Steve Hoerter	40%	166,000	100%(2)
Scott Biller, Ph.D.	40%	166,760	100%
Christopher Bowden, M.D.	40%	174,440	100%
Glenn Goddard	35%	86,052	75%(3)

(1) Mr. Hirsch joined the company on September 19, 2016. Pursuant to the terms of his employment offer letter, his 2016 cash incentive award payment was not pro-rated.

- (2) Mr. Hoerter joined the company on February 16, 2016. His 2016 cash incentive award payment was not pro-rated as the compensation committee determined that he was entitled to 100% of his target cash incentive award due to his performance in 2016.
- (3) Mr. Goddard resigned as our senior vice president, finance effective as of November 2, 2016 and received 75% of his 2016 target annual cash incentive payment in connection with his departure pursuant to the terms of the Severance Benefits Plan described below under "—*Employment, Severance and Change in Control Arrangements*—*Benefits Provided Upon Termination Not in Connection with a Change in Control.*"

All named executive officers' annual cash incentive target award percentages remained unchanged from the prior year, with the exceptions of Mr. Hirsch and Mr. Hoerter, who joined the company in 2016 and did not have a cash incentive target award for 2015.

## Equity Incentive Awards

Our equity award program is the primary long-term incentive vehicle for our executives. We believe that equity grants provide our executives with a strong link to our long-term performance, create an ownership culture and help to align the interests of our executives and our stockholders. Our executives benefit from stock options only if our stock price increases relative to the stock option's exercise price through the creation of shareholder value; similarly, the performance-based stock awards granted to our executives vest only after the achievement of specified regulatory milestones which benefit the company as a whole. Accordingly, we believe stock options and performance-based stock awards provide meaningful incentives to our executives to achieve increases in the value of our stock over time. In addition, the vesting feature of our equity grants contributes to executive retention by providing an incentive to our executives to remain employed by us during the vesting period.

Equity compensation represents the largest at-risk component of our named executive officers' compensation arrangements. We believe that it is appropriate to align the interests of our named executive officers with those of our stockholders to achieve and sustain long-term stock price growth. We use stock options, as well as performance-based stock awards, to compensate our named executive officers in the form of initial grants in connection with the commencement of employment, and generally grant stock options on an annual basis thereafter. None of our named executive officers are currently party to an employment agreement that provides for an automatic award of stock options or performance-based stock awards.

We grant stock options to our named executive officers with both time-based and performance-based vesting. The options that we grant to our named executive officers with time-based vesting typically become exercisable as to 25% of the shares underlying the option on the first anniversary of the grant date, and as to an additional 1/48th of the shares underlying the option monthly thereafter. The options that we grant to our named executive officers with performance-based vesting become exercisable upon the attainment of certain preclinical, clinical and regulatory milestone events recommended by our compensation committee and approved by our board of directors. Vesting and exercise rights cease shortly after termination of employment except in the case of death or disability. The exercise price of all stock options equals the fair market value of shares of our common stock on the date of grant. Prior to the exercise of an option, the holder has no rights as a stockholder with respect to the shares subject to such option, including no voting rights and no right to receive dividends or dividend equivalents. The performance-based stock awards that we have granted to our named executive officers vest a set time after the achievement of a specified regulatory milestone, and vesting of such awards ceases upon termination of employment. In specified termination and change in control circumstances, equity awards held by our named executive officers are subject to accelerated vesting. See "—Severance and Change in Control Benefits" below for further information.

In determining the size of the annual stock option grants to our named executive officers, our compensation committee, with the assistance from Radford, considers our company performance, individual

performance, the potential for enhancing the creation of value for our stockholders, the amount of equity previously awarded to the named executive officers and the vesting terms of such prior awards, the company's broader organizational equity needs and overall dilution, as well as industry and peer group benchmark data.

Our compensation committee made equity incentive awards to our named executive officers in the amounts set forth in the table below during 2016. In the case of each stock option award, these grants were based on the named executive officer's existing equity incentive holdings, level of responsibility within our company, equity ownership in relation to the peer group benchmark, and the compensation committee's assessment of the named executive officer's individual performance and our overall company performance in the fiscal year 2016, in each case without reference to any specific metric. Our compensation committee reduced the number of shares underlying annual equity incentive awards to our named executive officers by an average of 30% compared to 2015 (excluding Mr. Hirsch and Mr. Hoerter, neither of whom received an annual equity incentive award in 2015 and adjusting for the pro ration of Dr. Bowden's 2015 annual equity incentive award based on his start date in May 2014). A 25% average reduction was applied to annual equity awards to all other employees. In reducing the size of 2016 annual stock option awards to executives, our compensation committee, or board of directors, as applicable, sought to reduce the potential dilutive impact of new equity awards to accommodate the company's broader organizational growth without adversely affecting the competitiveness of our executive compensation program or undermining the long-term incentives provided by the company's compensation program.

	2016 Equity Incentive Awards	% Change over 2015 in the Number of Equity Incentive Awards
David P. Schenkein, M.D.	102,000(1)	-25.0%
Andrew Hirsch	—(2)	_
Steve Hoerter	—(3)	_
Scott Biller, Ph.D.	45,220(1)	-33.5%
Christopher Bowden, M.D.	45,220(1)	166.0%(4)
Glenn Goddard(5)	20,330(1)	-33.6%

- (1) On February 15, 2016, our compensation committee, or board of directors, as applicable, approved the grant of these stock option awards at an exercise price of \$39.76. The options are time-based options of which 25% of the shares underlying the award will vest on the first anniversary of the grant date and the remaining shares will vest monthly thereafter in equal increments over 36 months.
- (2) Mr. Hirsch joined the company as our chief financial officer as of September 19, 2016. Mr. Hirsch was granted an option to purchase 125,000 shares of our common stock, at an exercise price of \$49.83 per share, and 15,000 performance share units in connection with his joining the company. Mr. Hirsch did not receive an annual equity incentive award in 2016.
- (3) Mr. Hoerter joined the company as our chief commercial officer as of February 16, 2016. Mr. Hoerter was granted an option to purchase 100,000 shares of our common stock, at an exercise price of \$39.76 per share, and 15,000 performance share units in connection with his joining the company. Mr. Hirsch did not receive an annual equity incentive award in 2016.
- (4) Dr. Bowden's 2015 annual equity incentive award was pro-rated based on his start date in May 2014. After adjusting for this proration, Dr. Bowden's 2016 annual equity incentive award decreased by 33.5% from his 2015 award.
- (5) Mr. Goddard resigned as our senior vice president, finance effective as of November 2, 2016.

We evaluate our equity award program on an annual basis to ensure that it appropriately links to our long-term performance by aligning the interests of our executives and our stockholders, remains competitive with industry and peer benchmarks and is consistent with our overall equity needs and dilution levels.

## 2017 Executive Compensation Decisions

In February 2017, our compensation committee and our board approved 2017 base salaries, target annual performance-based cash incentive levels and annual stock option awards for our named executive officers (other than Mr. Goddard, who resigned effective November 2, 2016), as set forth in the table below.

% Change in

	Target Bonus Award of 2017 Base Salary	Change in Target Bonus Award from 2016	2017 Base Salary	% Base Salary Increase over 2016	2017 Equity Incentive Awards	% Change in the Number of 2017 Equity Incentive Awards over 2016
David P. Schenkein,						
M.D.	60%	_	\$ 585,040	3.0%(1)	142,900(2)	40.1%(3)
Andrew Hirsch	40%		\$ 453,201	3.0%(1)	47,600(2)	_
Steve Hoerter	40%		\$ 427,451	3.0%(1)	47,600(2)	_
Scott Biller, Ph.D.	40%	_	\$ 429,397	3.0%(1)	47,600(2)	5.3%(4)
Christopher Bowden,						
M.D.	40%	_	\$ 449,174	3.0%(1)	47,600(2)	5.3%(4)

- (1) Increase reflects merit-based adjustment.
- (2) On February 21, 2017, our compensation committee, or board of directors, as applicable, approved the grant of these stock option awards at an exercise price of \$50.40. The options are time-based options of which 25% of the shares underlying the award will vest on the first anniversary of the grant date and the remaining shares will vest monthly thereafter in equal increments over 36 months.
- (3) Increase reflects market-based adjustment.
- (4) Increase reflects a performance modifier of 100% for 2017 equity incentive awards, compared to a performance modifier of 95% for 2016 equity incentive awards.

Salary increases for 2017 were made effective as of January 1, 2017. Our named executive officers' annual cash incentive target award percentages remain unchanged from 2016. The payouts for 2017 annual cash incentives will be based on our performance against specific research, clinical, operational and financial company goals and, as stated above, will be capped at 150% of the target payout level.

# Severance and Change in Control Benefits

In April 2016, our compensation committee adopted a Severance Plan, which applies to our named executive officers and certain other employees, which became effective as of April 22, 2016. The Severance Plan provides for severance benefits in the event of a termination of such named executive officer's employment by us without cause or by such employee for good reason either (i) before or more than 18 months after a change of control, or (ii) within 18 months following a change of control. The severance benefits set forth in the Severance Plan supersede the severance benefits and certain equity acceleration benefits set forth in employment offer letters with our named executive officers. Specifically, the Severance Plan eliminates single-trigger vesting on all equity grants made to our named executive officers after April 22, 2016, and provides that all unvested equity

awards shall vest in full if a named executive officer's employment is terminated by an acquirer or us without cause or by such named executive officer for good reason, each within 18 months following a change of control. For equity awards that were made prior to April 22, 2016, the applicable terms, if any, of the award agreements and employment offer letter between such named executive officer and us shall continue to apply and provide that:

- in the event of a termination of a named executive officer without cause or by a named executive officer for good reason not in connection with a change in control, then, subject to an effective release of claims against us, (i) Dr. Schenkein shall be entitled to receive accelerated vesting of 100% of such equity awards, and (ii) each of Drs. Biller and Bowden shall be entitled to receive accelerated vesting of 25% of the original number of shares such equity awards granted.
- upon a change of control, and subject to an effective release of claims against us, each of Drs. Biller, Bowden and Schenkein will be entitled to accelerated vesting of 75% of the then unvested shares under any equity awards granted prior to April 22, 2016, with the remaining 25% of such awards continuing to vest in accordance with the vesting schedule for such awards. If a named executive officer, other than Mr. Goddard (who resigned as our senior vice president, finance, effective November 2, 1016), is terminated without cause or leaves for good reason upon or within 18 months following the change in control, then his equity awards shall immediately vest and become exercisable in full.

Please refer to "—Employment, Severance and Change in Control Arrangements" below for a more detailed discussion of severance and change in control benefits for our named executive officers. We also have provided estimates of the value of the severance payments made and other benefits provided to our named executive officers under specified termination circumstances under the caption "—Potential Payments Upon Termination or Change in Control" below. We believe that providing these benefits helps us compete for executive talent. These benefits are designed to promote stability and continuity of our senior management and are intended to preserve employee morale and productivity and encourage retention in the face of the disruptive impact of an actual, threatened, or rumored change of control of the company.

# Health and Welfare Benefits

Our named executive officers are eligible to participate in all of our employee benefit plans, including our medical, dental, vision, life and disability insurance plans, in each case on the same basis as other employees. We believe that these health and welfare benefits help ensure that we have a productive and focused workforce through reliable and competitive health and other benefits.

# 401(k) Retirement Plan

We maintain a 401(k) retirement plan that is intended to be a tax-qualified defined contribution plan under Section 401(k) of the Internal Revenue Code. In general, all of our employees are eligible to participate, beginning on the first day of the month following commencement of their employment. The 401(k) plan includes a salary deferral arrangement pursuant to which participants may elect to reduce their current compensation by up to the statutorily prescribed limit, equal to \$18,000 in 2016, and have the amount of the reduction contributed to the 401(k) plan. Participants who will turn age 50 in 2016 are also eligible to make "catch-up" contributions, which in 2016 may be up to an additional \$6,000 above the statutory limit. We currently match employee 401(k) contributions at a rate of \$0.50 for each dollar contribution, up to 6% of eligible contributions. Matching contributions are 100% vested immediately.

### Clawback Policy

Effective April 2016, we adopted a "clawback policy" which, in general, provides that, in the event that we are required to prepare an accounting restatement for periods ending on or after such date, we will make a reasonable attempt to recover from our current or former executive officers the pre-tax amount of certain incentive-based compensation in excess of what would have been paid to such executive officer after giving effect to the accounting restatement. For purposes of the policy, incentive-based compensation means any compensation that is granted, earned or vested based wholly or in part upon the attainment of any measures determined and presented in accordance with the accounting principles used in preparing the company's financial statements, any measures derived wholly or in part from such financial information, stock price or total shareholder return. If the incentive-based compensation is based on our stock price or total shareholder return and the amount of excess incentive-based compensation is not calculable directly from the information in an accounting restatement, the amount recovered shall be based on a reasonable estimate of the effect of the accounting restatement on the stock price or total shareholder return upon which the incentive-based compensation was received. The policy shall be interpreted by our board of directors, or a duly established committee thereof.

# **Perquisites**

We do not provide perquisites or personal benefits to our named executive officers.

## Anti-Hedging and Pledging Policy

Our insider trading policy expressly prohibits all of our employees, including our named executive officers, as well as our directors, from engaging in speculative transactions in our stock, including short sales, puts/calls, hedging transactions and margin accounts or pledges.

### No Tax Gross-ups

We do not provide for any tax gross-up payments to our named executive officers.

## Accounting and Tax Considerations

While our compensation committee generally considers the financial accounting and tax implications to our company of its executive compensation decisions, neither element was a material consideration in the compensation awarded to our named executive officers in 2016. For example, Section 162(m) of the Code generally disallows a tax deduction for compensation in excess of \$1.0 million paid by a public company to its chief executive officer and to each other officer (other than its chief financial officer) whose compensation is required to be reported to stockholders by reason of being among the three most highly paid executive officers. Qualified performance-based compensation is not subject to the deduction limitation if specified requirements are met by us. We will periodically review the potential consequences of Section 162(m) on the various elements of our executive compensation program. Our board of directors or compensation committee may, in its judgment, authorize compensation payments that do not comply with the exemptions in Section 162(m) when it believes that such payments are appropriate to attract and retain executive talent.

## Stock Ownership Guidelines

In April 2016, our compensation committee established equity ownership guidelines for our directors and executive officers to further align the interests of our board of directors and named executive officers with those of stockholders. The equity ownership guidelines are as follows: our chief executive officer must own shares

worth at least three times his base salary; our other executive officers must own shares worth at least their base salary; and our non-employee directors must own shares worth at least three times the annual cash retainer. Our chief executive officer, other executive officers and non-employee directors have five years from May 1, 2016 to satisfy these guidelines.

# **Summary Compensation Table**

The following table shows information regarding the compensation of our named executive officers during the fiscal years ended December 31, 2016, 2015 and 2014.

Name and Principal Position	<u>Year</u>	Salary (\$)	Bonus (\$)	Stock Awards (\$)(1)	Option Awards (\$)(1)	Non-equity Incentive Plan Compensation (\$)(2)	All Other Compensation (\$)(3)	Total (\$)
David P. Schenkein, M.D.(4) President and Chief Executive Officer		5 517,500		\$ \$	, ,	0 \$ 295,000	\$ 9,928 \$ 10,052 \$ 1,978	\$ 3,500,779 \$ 10,113,222 \$ 4,359,241
Andrew Hirsch(5)  Chief Financial  Officer	2016 \$ 2015 2014	S 126,667 -	\$	747,450 \$	4,186,74	6 \$ 176,000	\$ 698 - -	\$ 5,237,561
Steve Hoerter(6)  Chief Commercial  Officer	2016 \$ 2015 2014	363,125	\$ 375,000 \$	596,400 \$	2,527,80	8 \$ 166,000	\$ 9,549 -	\$ 4,037,882
Scott Biller, Ph.D.  Chief Scientific  Officer	2016 \$ 2015 \$ 2014 \$			\$ \$ \$	4,647,69	5 \$ 152,325	\$ 10,221 \$ 10,044 \$ 2,271	\$ 1,739,858 \$ 5,210,964 \$ 2,342,501
Christopher Bowden, M.D.(7) Chief Medical Officer	2016 \$ 2015 \$ 2014 \$	403,800	\$ 150,000 \$ \$120,000		-,,	2 \$ 153,439	\$ 10,044	\$ 1,765,621 \$ 2,285,002 \$ 3,425,898
Glenn Goddard(8)  Former Sr. Vice  President,  Finance	2016 \$ 2015 \$ 2014 \$	, , , , , , , , , , , , , , , , , , , ,	\$	\$ \$ 502,400 \$	2,094,15	0 \$ 105,824	\$ 9,866	\$ 942,144 \$ 2,528,140 \$ 1,816,182

- (1) Amounts listed represent the aggregate fair value amount computed as of the grant date of the awards granted in accordance with FASB ASC Topic 718. Assumptions used in the calculation of these amounts are included in Note 8, Share-Based Payments, of the Notes to our Consolidated Financial Statements filed on our Annual Report on Form 10-K, filed with the SEC on February 16, 2017.
- (2) Amounts represent awards to our named executive officers under our annual performance-based cash incentive program. See "Annual Performance-based Cash Incentives" for a description of that program. Annual cash incentive compensation earned during the year is typically paid in the following year.
- (3) Amounts represent the dollar value of group life insurance premiums paid during the fiscal year with respect to life insurance for the named executive officer, as well as premiums paid by us for short- and long-term disability insurance policies consistent with those provided to all of our employees. Amounts also include a matching contribution to the company's 401(k) plan of \$7,950 for each named executive officer in 2016, except Dr. Bowden, who received \$7,276, and Mr. Hirsch, who did not participate in the plan in 2016.

- (4) Dr. Schenkein also serves as a member of our board of directors but does not receive any additional compensation for his service as a director.
- (5) Mr. Hirsch's 2016 annual base salary is \$440,000; however, as Mr. Hirsch joined the company as chief financial officer in September 2016, his base salary reported was pro-rated in 2016. In addition, Mr. Hirsch received a stock option award and performance share units upon hire.
- (6) Mr. Hoerter's 2016 annual base salary is \$415,000; however, as Mr. Hoerter joined the company as chief commercial officer in February 2016, his base salary reported was pro-rated in 2016. In addition, Mr. Hoerter received a sign-on bonus of \$375,000 and received a stock option award and performance share units upon hire.
- (7) Dr. Bowden's 2014 annual base salary is \$395,000; however, as Dr. Bowden joined the company as chief medical officer in May 2014, his base salary reported was pro-rated in 2014. Dr. Bowden received a sign-on bonus of \$120,000 in 2014 and a relocation bonus of \$150,000 in 2015. Dr. Bowden also was eligible to participate in the annual cash incentive program in 2014, with his award being pro-rated. Additionally, Dr. Bowden received a stock option award upon hire.
- (8) Mr. Goddard resigned as our senior vice president of finance effective November 2, 2016. In connection with his resignation, he received severance benefits under the Severance Benefits Plan, as described below under "—*Employment, Severance and Change in Control Arrangements—Benefits Provided Upon Termination Not in Connection with a Change in Control.*" All Other Compensation includes the following 2016 compensation paid to Mr. Goddard subsequent to his resignation, pursuant to the terms of the Severance Benefits Plan: \$56,228 in salary, \$86,052 in bonus and \$3,478 of medical benefits.

#### **Grants of Plan-Based Awards**

The following tables sets forth information concerning each grant of an award made to a named executive officer during the fiscal year ended December 31, 2016 under any plan, contract, authorization or arrangement pursuant to which cash, securities, similar instruments or other property may be received:

Create of Plan Posed Awards

		Grants of Plan-Based Awards							
		Date of Compensation	Estimated Future Payouts Under Non-Equity Incentive Plan Awards(1)			All Other Stock Option Awards: Awards: Number of Shares of Securities		Exercise or Base Price of Option	of Stock
Name		Committee Approval	Threshold (\$)	Target (\$)	Maximum (\$)		Underlying Options(#)	Awards (\$)	Awards (\$)(2)
David P. Schenkein, M.D.(3)			-	340,800	511,200				
	2/16/16	2/15/16					102,000(4)	39.76	2,582,051
Andrew Hirsch(3)(5)			-	176,000	264,000				
	9/20/16	9/20/16					125,000(5)	49.83	4,186,746
	9/20/16	9/20/16				15,000(6)			747,450
Steve Hoerter(3)(7)			-	166,000	249,000				
	2/16/16	2/15/16					100,000(4)	39.76	2,527,808
	2/16/16	2/15/16				15,000(7)			596,400
Scott Biller, Ph.D.(3)			-	166,756	250,134				
	2/16/16	2/15/16					45,220(4)	39.76	1,145,987
Christopher Bowden, M.D.(3)			-	174,436	261,654				
	2/16/16	2/15/16					45,220(4)	39.76	1,145,987
Glenn Goddard(3)(8)			-	114,736	172,104				
	2/16/16	2/15/16					20,330(4)	39.76	515,239

- (1) Amounts shown in the threshold, target and maximum columns reflect the minimum, target and maximum amounts, respectively, payable under our annual incentive cash program as described above under "Annual Performance-based Cash Incentives." Actual amounts paid are presented in the Summary Compensation Table above.
- (2) Amounts listed represent the aggregate fair value amount computed as of the grant date of the awards granted in accordance with FASB ASC Topic 718. Assumptions used in the calculation of these amounts are included in Note 8, Share-Based Payments, of the Notes to our Consolidated Financial Statements filed on our Annual Report on Form 10-K, filed with the SEC on February 16, 2017.
- (3) For information on vesting acceleration upon termination of employment, see the "—*Employment, Severance and Change in Control Arrangements*" section below.
- (4) On February 15, 2016, our compensation committee and the board of directors, as applicable, approved this grant at an exercise price of \$39.76, the closing price of our common stock on the date of grant. The options are time-based options, and 25% of the shares underlying the options will vest on the first anniversary of the grant date and the remaining shares will vest monthly thereafter in equal increments over 36 months.
- (5) On September 20, 2016, our compensation committee approved this grant at an exercise price of \$49.83, the closing price of our common stock on the date of grant. The options are time-based options, and 25% of the shares underlying the options will vest on the first anniversary of the grant date and the remaining shares will vest monthly thereafter in equal increments over 36 months.
- (6) On September 20, 2016, our compensation committee approved the grant of 15,000 performance share units to Mr. Hirsch in connection with the start of his employment. Performance-based vesting criteria relates to milestone events specific to the company's corporate goals, specifically the achievement of regulatory development milestones related to the company's product candidates. Upon vesting, each performance share unit represents a contingent right to receive one share of our common stock.
- (7) On February 15, 2016, our compensation committee approved the grant of 15,000 performance share units to Mr. Hoerter in connection with the start of his employment. Performance-based vesting criteria relates to milestone events specific to the company's corporate goals, specifically the achievement of regulatory development milestones related to the company's product candidates. Upon vesting, each performance share stock unit represents a contingent right to receive one share of our common stock.
- (8) Mr. Goddard resigned as our senior vice president, finance effective November 2, 2016.

# **Outstanding Equity Awards at Fiscal Year-End**

The following table sets forth information concerning outstanding equity awards for each of our named executive officers at December 31, 2016:

		Option Awards						Stock Awards		
		Number of Securities Underlying	Number of Securities Underlying	Equity Incentive Plan Awards: Number of Securities			Number of shares or units of	Market value of shares or units of stock that		
Name	Grant Date	Unexercised Options Exercisable (#)	Unexercised Options Unexercisable (#)	Underlying Unexercised Unearned Options (#)	Option Exercise Price (\$)	Option Expiration Date	stock that have not vested (#)	have not vested (#)		
David P. Schenkein, M.D.(1)										
David 1. Schenkem, M.D.(1)	08/13/2009	225,837	_	_	\$0.30	08/12/2019				
	08/13/2009	207,692	_	_	\$0.30	08/12/2019				
	03/02/2011	36,363	-	-	\$0.47	03/01/2021				
	04/06/2012	72,727	-	-	\$2.34	04/05/2022				
	04/28/2013	68,181	-	68,182(2)	\$9.05	04/29/2023				
	03/05/2014	98,694	50,007(3)	-	\$31.64	03/04/2024				
	03/02/2015	59,497	76,503(3)	-	\$107.89	03/01/2025				
	02/16/2016	-	102,000(3)	-	\$39.76	02/15/2026				
Andrew Hirsch(1)										
,	09/20/2016	-	125,000(3)	-	\$49.83	09/19/2026				
	09/20/2016	-		-	_	-	15,000(4)	625,950		
Steve Hoerter(1)										
Steve Hoorter(1)	02/16/2016	_	100,000(3)	_	\$39.76	02/15/2026				
	02/16/2016	-	-	-	-	-	15,000(5)	625,950		
Scott Biller, Ph.D.(1)										
Scott Biller, Th.B.(1)	12/07/2010	6,500	_	_	\$0.47	12/06/2020				
	12/07/2010	838	_	4,636(6)	\$0.47	12/06/2020				
	12/07/2010	14,375	_	-	\$0.47	12/06/2020				
	04/06/2012	63,636	-	-	\$2.34	04/05/2022				
	04/30/2013	20,000	-	34,090(2)	\$9.05	04/29/2023				
	03/05/2014	10,281	25,005(3)	-	\$31.64	03/04/2024				
	03/02/2015	29,744	38,256(3)	-	\$107.89	03/01/2025				
	02/16/2016	-	45,220(3)	-	\$39.76	02/15/2026				
Christopher Bowden, M.D.(1)	)									
, , , , , , , , , , , , , , , , , , , ,	05/31/2014	72,500	42,500(3)	-	\$35.16	05/30/2024				
	03/02/2015	7,436	9,564(3)	-	\$107.89	03/01/2025				
	12/21/2015	-		-	_	-	6,265(7)	261,438		
	02/16/2016	-	45,220(3)	-	\$39.76	02/15/2026				
Glenn Goddard(1)(8)										
- ( )(-)	09/15/2011	455	_	-	\$0.69	09/14/2021				
	08/28/2013	15,440	9,167(3)	-	\$23.10	08/27/2023				
	03/05/2014	15,744	12,507(3)	-	\$31.64	03/04/2024				
	03/02/2015	13,383	17,217(3)	-	\$107.89	03/01/2025				
	02/16/2016	_	20,330(3)	-	\$39.76	02/15/2026				

- (1) For information on equity acceleration benefits under specified circumstances, see "—Employment, Severance and Change in Control Arrangements."
- (2) The shares vest as follows: 50% upon the initiation of our first pivotal clinical trial, as determined by our board of directors; and 50% upon the submission to the U.S. Food and Drug Administration of our first NDA or foreign equivalent, as determined by our board of directors.

- (3) The shares will vest as follows: 25% on the first anniversary of the grant date with the remaining shares vesting monthly thereafter in equal increments over 36 months.
- (4) On September 20, 2016, our compensation committee approved the grant of 15,000 performance share units to Mr. Hirsch in connection with the start of his employment. Performance-based vesting criteria relates to milestone events specific to the company's corporate goals, specifically the achievement of regulatory development milestones related to the company's product candidates, which was deemed to be not probable as of December 31, 2016. Upon vesting, each performance share unit represents a contingent right to receive one share of our common stock.
- (5) On February 15, 2016, our compensation committee approved the grant of 15,000 performance share units to Mr. Hoerter in connection with the start of his employment. Performance-based vesting criteria relates to milestone events specific to the company's corporate goals, specifically the achievement of regulatory development milestones related to the company's product candidates, which was deemed to be not probable as of December 31, 2016. Upon vesting, each performance share unit represents a contingent right to receive one share of our common stock.
- (6) The shares commence vesting upon the closing of a significant new strategic collaboration, as determined by our board of directors, at which point the shares underlying this option will vest as follows: 25% immediately, with equal monthly vesting for the remaining unvested shares over the following 36 months.
- (7) On December 3, 2015, our compensation committee approved the grant of 6,265 performance share units to Dr. Bowden to reflect a market adjustment to his equity position in the company. Performance-based vesting criteria relates to milestone events specific to the company's corporate goals, specifically the achievement of regulatory development milestones related to the company's product candidates, which was deemed to be not probable as of December 31, 2016. Upon vesting, each performance share unit represents a contingent right to receive one share of our common stock.
- (8) Mr. Goddard resigned as our senior vice president, finance effective November 2, 2016.

# **Option Exercises and Stock Vested**

The following table sets forth information concerning option exercises and stock vested for each of our named executive officers during the fiscal year ended December 31, 2016:

	Options Av	Options Award			
	Number of Shares Acquired on Exercise(#)	Value Realized on Exercise(\$)(1)			
David P. Schenkein, M.D.	40,000	2,363,600			
Andrew Hirsch	_	_			
Steve Hoerter Scott Biller, Ph.D.	95,200	5,010,333			
Christopher Bowden, M.D.	93,200	5,010,555			
Glenn Goddard(2)	4,329	181,385			

- (1) The value realized when the stock options were exercised represents the excess of the fair market value of the shares at the time of exercise over the exercise price of the stock options.
- (2) Mr. Goddard resigned as our senior vice president, finance effective November 2, 2016.

#### **Employment, Severance and Change in Control Arrangements**

Severance Benefits Plan

In April 2016, our compensation committee adopted a Severance Benefits Plan, or the Severance Plan, which applies to our named executive officers and certain other officers and key employees. The Severance Plan provides for severance benefits in the event of a termination of such named executive officer's employment by us without cause or by such employee for good reason either (i) before or more than 18 months after a change of control, or (ii) within 18 months following a change in control. Except as specifically provided below, the severance benefits set forth in the Severance Plan supersede any severance benefits set forth in award agreements and/or employment offer letters with such named executive officers.

Benefits Provided Upon Termination Not in Connection with a Change in Control. Under the terms of the Severance Plan, subject to the execution and effectiveness of a release of claims against us, if a named executive officer's employment is terminated by us without cause or by such named executive officer for good reason prior to or more than 18 months following a change of control:

- (i) we are obligated (A) to pay an amount equal to his then-current monthly base salary for a period of 12 months and 100% of his target annual cash incentive in a lump sum, with the exception of Mr. Goddard, who was entitled to (and in March 2017 received, in connection with his resignation) an amount equal to his then-current monthly base salary for a period of 9 months and 75% of his target annual cash incentive in a lump sum, and (B) subject to certain exceptions, to contribute to the cost of COBRA coverage for health and dental insurance on the same basis as our contribution to company-provided health and dental insurance coverage in effect for active employees with the same coverage elections for a period of 12 months, with the exception of Mr. Goddard, who was entitled to (and receives, in connection with his resignation) such insurance for a period of 9 months; and
- (ii) there will be no vesting acceleration for any equity award made to our named executive officers on or after April 22, 2016, the effective date of the Severance Plan, and for any equity awards granted prior to the effective date of the Severance Plan, the treatment of such equity awards shall be dictated by the applicable terms, if any, of the award agreements and/or employment offer letter between such named executive officer and us.

Benefits Provided Upon Termination in Connection with a Change in Control. Under the terms of the Severance Plan, subject to the execution and effectiveness of a release of claims against us, if a named executive officer's employment is terminated by us without cause or by such named executive officer for good reason within 18 months following a change of control:

(i) we are obligated (A) to pay an amount equal to his then-current monthly base salary for a period of 12 months and 100% of his target annual cash incentive in a lump sum, with the exception of Dr. Schenkein, who will be entitled to an amount equal to his then-current monthly base salary for a period of 24 months and 200% of his target annual cash incentive in a lump sum, and Mr. Goddard, who was entitled to an amount equal to his then-current monthly base salary for a period of 9 months and 75% of his target annual cash incentive in a lump sum, and (B) subject to certain exceptions, to contribute to the cost of COBRA coverage for health and dental insurance on the same basis as our contribution to company-provided health and dental insurance coverage in effect for active employees with the same coverage elections for a period of 12 months, with the exception of Dr. Schenkein, who will be entitled to such insurance for a period of 9 months; and

(ii) any unvested equity awards shall become fully vested; provided that the treatment for such named executive officers' equity awards granted prior to the effective date of the Severance Plan shall be governed by the applicable terms, if any, of the award agreements and/or employment offer letter between such named executive officer and us.

For a discussion of the vesting acceleration for equity awards made to Drs. Schenkein, Biller and Bowden prior to April 22, 2016, the effective date of the Severance Plan, see "—Employment Offer Letters," below.

#### Employment Offer Letters

We have entered into employment offer letters with each of our named executive officers pursuant to which such named executive officer is employed "at will," meaning he or we may terminate the employment arrangement at any time. Such offer letters establish the named executive officer's title, initial compensation arrangements, and eligibility for benefits made available to employees generally.

The terms of employment offer letters with each of Drs. Schenkein, Biller and Bowden provide for any equity awards that were made prior to April 22, 2016, the effective date of the Severance Plan, to accelerate as follows:

- (i) in the case of Dr. Schenkein (A) in the event of a change of control, 75% of his unvested shares shall vest immediately, and 25% of his unvested shares shall continue to vest, but shall be subject to immediate vesting in full if Dr. Schenkein is terminated without cause or resigns for good reason upon or within 18 months following such change in control, and (B) in the event that he is terminated without cause or for good reason prior to a change of control, then all of his then unvested shares shall immediately vest in full; and
- (ii) in the case of Drs. Biller and Bowden, (A) in the event of a change of control, 75% of such officer's unvested shares shall vest immediately, and 25% of such officer's unvested shares shall continue to vest, but shall be subject to immediate vesting in full if such officer is terminated without cause or resigns for good reason upon or within 18 months following such change in control, and (B) in the event that such officer is terminated without cause or resigns for good reason prior to a change of control, then 25% of the original number of shares underlying such officer's equity awards shall immediately vest in full.

## Other Agreements

We have entered into non-competition, non-solicitation, confidentiality and assignment agreements with each of our named executive officers. Under the non-competition, non-solicitation, confidentiality and assignment agreements, each named executive officer has agreed (i) not to compete with us during his employment and for a period of one year after the termination of his employment, (ii) not to solicit our employees or customers during his employment and for a period of one year after the termination of his employment, (iii) to protect our confidential and proprietary information, and (iv) to assign to us related intellectual property that is developed during the course of his employment and for a period of six months after the termination of his employment, that results from tasks assigned by us or that results from the use of our property, premises, or confidential information.

## Potential Payments Upon Termination or Change in Control

In April 2016, our compensation committee adopted a Severance Plan, which applies to our named executive officers. The Severance Plan provides for severance benefits in the event of a termination of such

named executive officer's employment by us without cause or by such employee for good reason, either (i) before or more than 18 months after a change of control, or (ii) within 18 months following a change in control. The severance benefits set forth in the Severance Plan supersede certain severance benefits that were in effect on December 31, 2015 and that are set forth in the table below under "Payments Before Giving Effect to Severance Plan." Accordingly, the following table sets forth potential payments upon termination and change in control that would be made to our named executive officers, assuming that such termination or change in control occurred on December 31, 2015, but after giving effect to the adoption of the Severance Plan. In addition to the amounts shown in the table below, each executive would be entitled to receive payments for base salary and vacation time accrued through the date of termination and payment for any reimbursable business expenses incurred. Mr. Goddard is not included in the table below as he was no longer an executive officer of the company as of November 2016. Prior to stepping down, Mr. Goddard was entitled to severance benefits as described under "—Employment, Severance and Change in Control Arrangements" above.

			Triggering Event	:
Name	Benefit	Change in Control (Without Termination of Employment) (\$)	Resignation For Good Reason or Termination Without Cause Before or More Than 18 Months Following a Change In Control (\$)	Resignation For Good Reason or Termination Without Cause Upon or Within 18 Months Following a Change-in- Control (\$)
David P. Schenkein, M.D.	Severance Payments	_	568,000(1)	1,136,000(8)
	Bonus Payment Continuation of Benefits	_	340,800(2) 20,871(3)	681,600(9) 41,742(10)
	Market Value of Stock Vesting(4)	2,200,402(5)	2,933,869(6)	2,933,869(6)
	Total	2,200,402	3,863,540	4,793,211
Andrew Hirsch	Severance Payments		440,000(1)	440,000(1)
	Bonus Payment	_	176,000(2)	176,000(2)
	Continuation of Benefits	_	20,871(3)	20,871(3)
	Market Value of Stock Vesting(4)			625,950(6)
	Total		636,871	1,262,821
Steve Hoerter	Severance Payments		415,000(1)	415,000(1)
	Bonus Payment	_	166,000(2)	166,000(2)
	Continuation of Benefits	_	20,871(3)	20,871(3)
	Market Value of Stock Vesting(4)			822,950(6)
	Total		601,871	1,424,821
Scott Biller, Ph.D.	Severance Payments	_	416,889(1)	416,889(1)
	Bonus Payment	_	166,756(2)	166,756(2)
	Continuation of Benefits	<del>-</del>	20,871(3)	20,871(3)
	Market Value of Stock Vesting(4)	1,235,117(5)	630,140(7)	1,646,823(6)
	Total	1,235,117	1,234,655	2,251,339
Christopher Bowden, M.D.	Severance Payments	_	436,090(1)	436,090(1)
	Bonus Payment		174,436(2)	174,436(2)
	Continuation of Benefits		20,871(3)	20,871(3)
	Market Value of Stock Vesting(4)	472,310(5)	284,730(7)	629,747(6)
	Total	472,310	916,127	1,261,144

- (1) Represents 12 monthly payments of each executive's monthly base salary from the time of termination.
- (2) Represents a lump sum payment equal to each executive's target annual cash incentive bonus.

- (3) Represents the cost of continued health and dental benefits. These benefits are payable until 12 months following termination.
- (4) These awards would become vested and the value of the acceleration would be equal to the shares multiplied by the excess of the then current stock price over the exercise price of the options. For purposes of this table, we have calculated the value of the acceleration using the closing price of our common stock on December 30, 2016, or \$41.73 per share.
- (5) Represents the acceleration of vesting as to 75% of the unvested equity awards held by the executive.
- (6) Represents the acceleration of vesting as to 100% of the unvested equity awards held by the executive.
- (7) Represents the acceleration of vesting as to 25% of the original equity awards held by the executive (or if the number of unvested shares subject to such equity award is less than 25% of the original number of shares subject to such equity award, then all remaining unvested shares subject to such equity award shall fully vest).
- (8) Represents 24 monthly payments of executive's monthly base salary from the time of termination.
- (9) Represents a lump sum payment equal to two years of executive's target annual cash incentive bonus.
- (10) Represents the cost of continued health and dental benefits. These benefits are payable until 24 months following termination.

## Securities Authorized for Issuance Under Our Equity Compensation Plans

The following table provides information about the securities authorized for issuance under our equity compensation plans as of December 31, 2016.

# **Equity Compensation Plan Information**

Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted- average exercise price of outstanding options, warrants and rights	securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
	(a)	<b>(b)</b>	(c)
Equity compensation plans approved by security holders			
2013 Stock Incentive Plan	5,218,880	\$ 46.79	759,556(1)
2013 Employee Stock Purchase Plan	_	_	273,442(2)
Equity compensation plans not approved by security			
holders	_	_	_
Total	5,218,880	\$ 46.79	1,032,998

Number of

(1) Our 2013 Stock Incentive Plan, or 2013 Plan, has an evergreen provision that allows for an annual increase in the number of shares available for issuance under the 2013 Plan to be added on the first day of each fiscal

year, beginning with the fiscal year ending December 31, 2014 and continuing until the expiration of the 2013 Plan, equal to the least of 2,000,000 shares of our common stock, 4% of the number of shares of our common stock outstanding on the first day of the applicable fiscal year or an amount determined by our board of directors. On January 1, 2017, 1,688,817 additional shares were reserved for issuance under the 2013 Plan pursuant to this provision.

(2) Our 2013 Employee Stock Purchase Plan, or 2013 ESPP, has an evergreen provision that allows for an annual increase in the number of shares available for issuance under the 2013 ESPP to be added on the first day of each fiscal year, beginning on January 1, 2014 and ending on December 31, 2023, in an amount equal to the least of 509,091 shares of our common stock, 1% of the total number of shares of our common stock outstanding on the first day of the applicable fiscal year or an amount determined by our board of directors. The number of shares reserved for issuance under the 2013 ESPP has not increased since the adoption of the 2013 ESPP.

## **Compensation Committee Interlocks and Insider Participation**

For 2016, the members of our compensation committee were Ms. Foster (chair), Dr. Maraganore and Mr. Nelson, each of whom is an independent director. None of our executive officers served as a director or a member of a compensation committee (or other committee serving an equivalent function) of any other entity, one of whose executive officers served as a director or member of our compensation committee during the fiscal year ended December 31, 2016.

## **Compensation Committee Report**

The compensation committee has reviewed and discussed the Compensation Discussion and Analysis required by Item 402(b) of Regulation S-K with our management. Based on this review and discussion, the compensation committee recommended to our board of directors that the Compensation Discussion and Analysis be included in this proxy statement.

This report of the compensation committee is not "soliciting material," shall not be deemed "filed" with the SEC and shall not be incorporated by reference by any general statement incorporating by reference this proxy statement into any filing under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing, except to the extent that we specifically incorporate this information by reference, and shall not otherwise be deemed filed under such acts.

The foregoing report has been furnished by the compensation committee.

Respectfully submitted,

The Compensation Committee of the Board of Directors

Kaye Foster (chair) John M. Maraganore Robert T. Nelson

#### CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

Since January 1, 2016, we have engaged in the following transactions with our directors, director nominees, executive officers and holders of more than 5% of our voting securities (or their immediate family members), and affiliates of our directors, executive officers and 5% stockholders. We believe that all of the transactions described below were made on terms no less favorable to us than could have been obtained from unaffiliated third parties.

## **Celgene Corporation**

2016 Agreement

In May 2016, we entered into a master research and collaboration agreement with Celgene Corporation, or Celgene, and Celgene's wholly-owned subsidiary Celgene RIVOT Ltd. (the "2016 Agreement") The 2016 Agreement establishes a new global collaboration focused on the research and development of immunotherapies against certain metabolic targets that exert their antitumor efficacy primarily via the immune system.

Under the terms of the 2016 Agreement, we received an initial upfront payment in the amount of \$200 million. The research term of the agreement may be extended for up to two, or in specified cases, up to four, additional years by paying a \$40 million per-year extension fee. Celgene will pay an \$8 million designation fee for each program that Celgene designates for further development and for each continuation program. For each program as to which Celgene exercises its option to develop and commercialize, subject to antitrust clearance, Celgene will pay an option exercise fee of at least \$30 million.

Under the terms of the 2016 Agreement, following Celgene's exercise of its option with respect to a program, we or our affiliates and Celgene will enter into either a co-development and co-commercialization agreement if such program is in the immuno-oncology, or IO, field, or a license agreement if such program is in the inflammation or autoimmune, or I&I, field.

In certain cases, Celgene may exercise its option to develop and commercialize two early-stage programs in the I&I field prior to Celgene designating the program for further development, by paying an option exercise fee of \$10 million. For the co-development and co-commercialization program Celgene designates the 65/35 program in the IO field (for which Celgene will be the lead party for the United States and will have a 65% profit or loss share), we are eligible to receive up to \$209 million in potential milestone-based payments. The potential milestone-based payments for that program are comprised of: (i) a \$25 million milestone-based payment upon achievement of a specified clinical development event and (ii) up to \$184 million in milestone-based payments upon achievement of specified regulatory milestone events. For each co-development and co-commercialization program in the IO field other than the 65/35 program, we are eligible to receive up to \$169 million in potential milestone-based payments. The potential milestone-based payments for such programs are comprised of: (i) a \$20 million milestone-based payment upon achievement of a specified clinical development event and (ii) up to \$149 million in milestone-based payments upon achievement of specified regulatory milestone events.

For each licensed program in the I&I field, we are eligible to receive royalties at tiered, low double-digit percentage rates on Celgene's net sales, if any, of the applicable licensed products and up to \$386 million in potential milestone-based payments. The potential milestone-based payments for such programs are comprised of: (i) a \$25 million milestone-based payment upon achievement of a specified clinical development event, (ii) up to \$236 million in milestone-based payments upon achievement of specified regulatory milestone events, and (iii) up to \$125 million in milestone-based payments upon achievement of specified commercial milestone events.

## AG-120 Letter Agreement

In May 2016, we entered into a letter agreement with Celgene regarding ivosidenib (AG-120) (the "AG-120 Letter Agreement"). Under the AG-120 Letter Agreement, the parties have agreed to terminate our 2010 collaboration agreement focused on cancer metabolism, or the 2010 Agreement, effective as of August 15, 2016, as to the program directed to the IDH1 target, for which ivosidenib (AG-120) is the lead development candidate. Under the 2010 Agreement, Celgene had held development and commercialization rights to the IDH1 program outside of the United States, and we had held such rights inside the United States. As a result of the AG-120 Letter Agreement, we obtained global rights to ivosidenib (AG-120) and the IDH1 program. Neither party has any further financial obligation, including royalties or milestone payments, to the other concerning ivosidenib (AG-120) or the IDH1 program.

Based solely on a Schedule 13D/A filed with the SEC on December 17, 2014, entities affiliated with Celgene beneficially own more than 5% of our outstanding shares of common stock.

# **Policies and Procedures for Related Party Transactions**

In June 2013, our board of directors adopted written policies and procedures for the review of any transaction, arrangement or relationship in which we are a participant, the amount involved exceeds \$120,000, and one of our executive officers, directors, director nominees or 5% stockholders (or their immediate family members), each of whom we refer to as a "related person," has a direct or indirect material interest.

If a related person proposes to enter into such a transaction, arrangement or relationship, which we refer to as a "related person transaction," the related person must report the proposed related person transaction to our principal financial officer. The policy calls for the proposed related person transaction to be reviewed and, if deemed appropriate, approved by the audit committee. Whenever practicable, the reporting, review and approval will occur prior to entry into the transaction. If advance review and approval is not practicable, the committee will review, and, in its discretion, may ratify the related person transaction. The policy also permits the chairman of the committee to review and, if deemed appropriate, approve proposed related person transactions that arise between committee meetings, subject to ratification by the committee at its next meeting. Any related person transactions that are ongoing in nature will be reviewed annually.

A related person transaction reviewed under the policy will be considered approved or ratified if it is authorized by the committee after full disclosure of the related person's interest in the transaction. As appropriate for the circumstances, the committee will review and consider:

- the related person's interest in the related person transaction;
- the approximate dollar value of the amount involved in the related person transaction;
- the approximate dollar value of the amount of the related person's interest in the transaction without regard to the amount of any profit or loss;
- whether the transaction was undertaken in the ordinary course of our business;
- whether the terms of the transaction are no less favorable to us than terms that could have been reached with an unrelated third party;
- the purpose of, and the potential benefits to us of, the transaction; and

any other information regarding the related person transaction or the related person in the context
of the proposed transaction that would be material to investors in light of the circumstances of the
particular transaction.

The committee may approve or ratify the transaction only if the committee determines that, under all of the circumstances, the transaction is in or is not inconsistent with our best interests. The committee may impose any conditions on the related person transaction that it deems appropriate.

In addition to the transactions that are excluded by the instructions to the SEC's related person transaction disclosure rule, our board of directors has determined that the following transactions do not create a material direct or indirect interest on behalf of related persons and, therefore, are not related person transactions for purposes of this policy:

- interests arising solely from the related person's position as an executive officer of another entity (whether or not the person is also a director of such entity), that is a participant in the transaction, where (a) the related person and all other related persons own in the aggregate less than a 10% equity interest in such entity, (b) the related person and their immediate family members are not involved in the negotiation of the terms of the transaction and do not receive any special benefits as a result of the transaction, (c) the amount involved in the transaction equals less than the greater of \$1 million dollars or 2% of the annual consolidated gross revenues of the other entity that is a party to the transaction, and (d) the amount involved in the transaction equals less than 2% of our annual consolidated gross revenues; and
- a transaction that is specifically contemplated by provisions of our charter or bylaws.

Our related persons transaction policy provides that transactions involving compensation of executive officers shall be reviewed and approved by the compensation committee in the manner specified in its charter.

#### PROPOSAL 2—ADVISORY VOTE ON EXECUTIVE COMPENSATION

We are providing our stockholders the opportunity to vote to approve, on an advisory, non-binding basis, the compensation of our named executive officers as disclosed in this Proxy Statement in accordance with the SEC's rules. This proposal, which is commonly referred to as "say-on-pay," is required by the Dodd-Frank Wall Street Reform, or the Dodd-Frank Act, and Consumer Protection Act of 2010, which added Section 14A to the Securities Exchange Act of 1934, or the Exchange Act. Our executive compensation program is designed to reward value creation for stockholders and to attract, motivate, and retain our executive officers, who are critical to our success. Under this program, our named executive officers are rewarded for the achievement of our short-and long-term strategic and financial goals, which we believe serves to enhance short- and long-term value creation for our stockholders. The program contains elements of cash and equity-based compensation and are designed to align the interests of our executives with those of our stockholders and paying for performance.

The section of this Proxy Statement titled "Executive Compensation" beginning on page 33, including "Compensation Discussion and Analysis," describes in detail our executive compensation program and the decisions made by our compensation committee. As we describe in greater detail in the "Compensation Discussion and Analysis" section, our executive compensation program rewards value creation for stockholders and progress towards achieving our mission and that promotes company performance. At the same time, we believe our program does not encourage excessive risk-taking by management. While we do not have a formal or informal policy for allocating between long-term and short-term compensation, between cash and non-cash compensation or among different forms of non-cash compensation, we generally strive to provide our named executive officers with a mix of short-term and long-term performance-based incentives to encourage consistently strong performance, and our board of directors believes that this link between compensation and the achievement of our near- and long-term business goals has helped drive our performance over time.

Our board of directors is asking stockholders to approve a non-binding advisory vote on the following resolution:

RESOLVED, that the compensation paid to the Company's named executive officers, as disclosed pursuant to the compensation disclosure rules of the Securities and Exchange Commission, including the compensation discussion and analysis, the compensation tables and any related material disclosed in this Proxy Statement, is hereby approved.

As an advisory vote, this proposal is not binding. Neither the outcome of this advisory vote nor of the advisory vote included in Proposal 2 overrules any decision by the company or the board of directors (or any committee thereof), creates or implies any change to the fiduciary duties of the company or the board of directors (or any committee thereof), or creates or implies any additional fiduciary duties for the company or the board of directors (or any committee thereof). However, our compensation committee and board of directors value the opinions expressed by our stockholders in their vote on this proposal and intend to consider carefully the outcome of the vote when making future compensation decisions for named executive officers.

#### **Recommendation of the Board of Directors**

OUR BOARD OF DIRECTORS RECOMMENDS THAT STOCKHOLDERS VOTE TO APPROVE THE COMPENSATION OF OUR NAMED EXECUTIVE OFFICERS BY VOTING 'FOR' THIS PROPOSAL.

#### STOCKHOLDER PROPOSALS

Proposals of stockholders, including nominations for election to our board of directors, intended to be included in our proxy statement and form of proxy relating to, and presented at, our annual meeting of stockholders to be held in 2018 must be received by us no later than December 25, 2017, which is 120 days prior to the first anniversary of the mailing date of this proxy, unless the date of the 2018 annual meeting of stockholders is changed by more than 30 days from the anniversary of the Annual Meeting, in which case the deadline for such proposals will be a reasonable time before we begin to print and send our proxy materials. These proposals must comply with the requirements as to form and substance established by the SEC for such proposals in order to be included in the proxy statement.

In addition, our bylaws establish an advance notice procedure for nominations for election to our board of directors and other matters that shareholders wish to present for action at an annual meeting, but which will not be included in our proxy statement. In general, notice must be received at our principal executive offices not less than 90 calendar days before nor more than 120 calendar days before the one year anniversary of the previous year's annual meeting of stockholders. Therefore, to be presented at our 2018 annual meeting of stockholders, such a proposal must be received by us no earlier than February 13, 2018 and no later than March 15, 2018. However, if the date of the annual meeting is more than 20 days earlier or more than 60 days later than such anniversary date, notice must be received not later than the close of business 120 calendar days prior to such annual meeting and no later than the close of business on the later of 90 days prior to such annual meeting and 10 days following the day on which notice of the date of such annual meeting was mailed or public announcement of the date of such annual meeting was first made. If the stockholder fails to give notice by these dates, then the persons named as proxies in the proxies solicited by the board of directors for the 2018 annual meeting may exercise discretionary voting power regarding any such proposal. Stockholders are advised to review our bylaws which also specify requirements as to the form and content of a stockholder's notice.

Any proposals, notices or information about proposed director candidates should be sent to:

Min Wang, Corporate Secretary Agios Pharmaceuticals, Inc. 88 Sidney Street Cambridge, MA 02139

#### **OTHER MATTERS**

We do not know of any business that will be presented for consideration or action by the stockholders at the Annual Meeting other than that described in this Proxy Statement. If, however, any other business is properly brought before the meeting, shares represented by proxies will be voted in accordance with the best judgment of the persons named in the proxies or their substitutes.

We hope that you will attend the Annual Meeting. Whether or not you plan to attend, we urge you to vote your shares over the internet or by telephone, or to complete, date, sign and return the enclosed proxy card in the accompanying postage-prepaid envelope. A prompt response will greatly facilitate arrangements for the meeting, and your cooperation will be appreciated.