

AVEO PHARMACEUTICALS INC
Form DEF 14A
April 27, 2018

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 14A

Proxy Statement Pursuant to Section 14(a) of the
Securities Exchange Act of 1934

Filed by the Registrant

Filed by a party other than the Registrant

Check the appropriate box:

Preliminary Proxy Statement

Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))

Definitive Proxy Statement

Definitive Additional Materials

Soliciting Material Pursuant to §240.14a-12

AVEO PHARMACEUTICALS, INC.

(Name of Registrant as Specified In Its Charter)

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

Payment of Filing Fee (Check the appropriate box):

No fee required.

Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.

(1) Title of each class of securities to which transaction applies:

(2) Aggregate number of securities to which transaction applies:

Edgar Filing: AVEO PHARMACEUTICALS INC - Form DEF 14A

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

(4) Proposed maximum aggregate value of transaction:

(5) Total fee paid:

Fee paid previously with preliminary materials.

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

(1) Amount previously paid:

(2) Form, Schedule or Registration Statement No.:

(3) Filing party:

(4) Date Filed:

ONE BROADWAY, 14TH FLOOR CAMBRIDGE, MASSACHUSETTS 02142

NOTICE OF 2018 ANNUAL MEETING OF STOCKHOLDERS

To Be Held on June 18, 2018

To our Stockholders:

NOTICE IS HEREBY GIVEN that the Annual Meeting of Stockholders of AVEO Pharmaceuticals, Inc. will be held on Monday, June 18, 2018 at 10:00 a.m., Eastern Daylight Time, at One Broadway, 5th Floor, Cambridge, MA 02142. At the meeting, stockholders will consider and vote on the following matters:

1. To elect five directors, each to serve for a one-year term expiring at the 2019 annual meeting of stockholders;
2. To approve an advisory vote on executive compensation;
3. To ratify the appointment of Ernst & Young LLP as our independent registered public accounting firm for the year ending December 31, 2018.

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

Instead of mailing a printed copy of our proxy materials to all of our stockholders, we provide access to these materials via the Internet. This reduces the amount of paper necessary to produce these materials as well as the costs associated with mailing these materials to all stockholders. Accordingly, on or about April 30, 2018, we will begin mailing a Notice of Internet Availability of Proxy Materials, or Notice, to all stockholders of record on our books at the close of business on April 23, 2018, the record date for the annual meeting, and will post our proxy materials on the website referenced in the Notice. As more fully described in the Notice, stockholders may choose to access our proxy materials on the website referred to in the Notice or may request to receive a printed set of our proxy materials. In addition, the Notice and website provide information regarding how you may request to receive proxy materials in printed form by mail, or electronically by email, on an ongoing basis.

Stockholders of record at the close of business on April 23, 2018 are entitled to notice of, and to vote at, the annual meeting or any adjournment thereof. Your vote is important regardless of the number of shares you own. If you are a stockholder of record, you may vote by submitting your proxy in one of these three ways:

- Vote Over the Internet, by going to the website of our tabulator at www.proxyvote.com (have your Notice or proxy card in hand when you access the website);
- Vote by Telephone, by calling the toll-free number 1-800-690-6903 (have your Notice or proxy card in hand when you call); or
- Vote by Mail, if you received (or requested and received) a printed copy of the proxy materials, by returning the enclosed proxy card (signed and dated) in the envelope provided. If you vote by Internet or telephone, you are not required to mail your proxy.

You may also vote in person by attending the annual meeting and delivering your completed proxy card in person or by completing a ballot at the meeting.

If your shares are held in "street name," that is, held for your account by a bank, brokerage firm or other nominee, you will receive instructions from the holder of record that you must follow for your shares to be voted.

We encourage all stockholders to attend the annual meeting in person. You may obtain directions to the location of the annual meeting on our website at www.aveooncology.com. Stockholders who attend the meeting may vote their stock in person, even if they previously submitted their proxies. Whether or not you plan to attend the annual meeting in person, we hope you will take the time to vote your shares.

By Order of the Board of Directors,

Michael P. Bailey

President and Chief Executive Officer

Cambridge, Massachusetts

April 27, 2018

TABLE OF CONTENTS

<u>PROXY STATEMENT</u>	1
<u>IMPORTANT INFORMATION ABOUT THE ANNUAL MEETING AND VOTING</u>	2
<u>HOUSEHOLDING OF ANNUAL MEETING MATERIALS</u>	6
<u>OWNERSHIP OF OUR COMMON STOCK</u>	7
<u>SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE</u>	8
<u>PROPOSAL 1—ELECTION OF DIRECTORS</u>	8
<u>CORPORATE GOVERNANCE</u>	11
<u>General</u>	11
<u>Board Determination of Independence</u>	11
<u>Role of the Board</u>	12
<u>The Board’s Role in Risk Oversight</u>	12
<u>Board of Directors Meetings and Attendance</u>	13
<u>Director Attendance at Annual Meeting of Stockholders</u>	13
<u>Board Committees</u>	13
<u>Director Nomination Process</u>	14
<u>Communicating with the Independent Directors</u>	15
<u>Executive Officer and Director Compensation Processes</u>	16
<u>Report of the Audit Committee</u>	16
<u>Principal Accountant Fees and Services</u>	17
<u>Audit Committee Pre-Approval Policies and Procedures</u>	17
<u>CERTAIN RELATIONSHIPS AND RELATED PERSON TRANSACTIONS</u>	17
<u>Policies and Procedures for Related Person Transactions</u>	17
<u>Related Person Transactions</u>	18
<u>EXECUTIVE AND DIRECTOR COMPENSATION</u>	19
<u>Compensation Discussion and Analysis</u>	19
<u>Summary Compensation Table for the Years Ended December 31, 2017, 2016 and 2015</u>	34
<u>Grants of Plan-Based Awards for the Year Ended December 31, 2017</u>	35
<u>Outstanding Equity Awards at December 31, 2017</u>	37
<u>Option Exercises</u>	38
<u>Pay Ratio of Chief Executive Officer to Median Employee</u>	38
<u>Employment Agreements and Severance Arrangements</u>	38
<u>Potential Payments and Benefits Upon Termination and a Change in Control</u>	41
<u>Equity Compensation Plan Information</u>	43
<u>Compensation Committee Report</u>	44
<u>Compensation Committee Interlocks and Insider Participation</u>	44
<u>Director Compensation</u>	44
<u>PROPOSAL 2—ADVISORY VOTE ON EXECUTIVE COMPENSATION</u>	47
<u>PROPOSAL 3—RATIFICATION OF APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC</u>	
<u>ACCOUNTING FIRM</u>	48
<u>OTHER MATTERS</u>	48
<u>STOCKHOLDER PROPOSALS</u>	48

AVEO PHARMACEUTICALS, INC.

ONE BROADWAY, 14TH FLOOR

CAMBRIDGE, MASSACHUSETTS 02142

PROXY STATEMENT

for the 2018 Annual Meeting of Stockholders to be held on June 18, 2018

This Proxy Statement and the enclosed proxy card are being furnished in connection with the solicitation of proxies by the board of directors of AVEO Pharmaceuticals, Inc. for use at the Annual Meeting of Stockholders to be held on Monday, June 18, 2018 at 10:00 a.m., Eastern Daylight Time, at One Broadway, 5th Floor, Cambridge, MA 02142, and at any adjournment thereof. Except where the context otherwise requires, references to “AVEO Pharmaceuticals,” “we,” “AVEO,” “us,” “our,” the “company” and similar terms refer to AVEO Pharmaceuticals, Inc. and its consolidated subsidiaries.

All properly submitted proxies will be voted in accordance with the instructions contained in those proxies. If no instructions are specified, the proxies will be voted in accordance with the recommendation of our board of directors with respect to each of the matters set forth in the accompanying Notice of 2018 Annual Meeting of Stockholders. You may revoke your proxy at any time before it is exercised at the meeting by voting a later dated proxy or by giving our Secretary written notice to that effect.

On or about April 30, 2018, we are mailing to our stockholders a Notice of Internet Availability of Proxy Materials instead of a paper copy of this Proxy Statement, our 2017 Annual Report to Stockholders on Form 10-K and a form of proxy card or voting instruction card, as permitted by the rules of the Securities and Exchange Commission, or the SEC. The Notice contains instructions on how to access those documents over the Internet. The Notice also contains instructions on how you may receive a paper copy of our proxy materials, including this Proxy Statement, our 2017 Annual Report to Stockholders on Form 10-K and a form of proxy card or voting instruction card.

Important Notice Regarding the Availability of Proxy Materials for

the Annual Meeting of Stockholders to be held on June 18, 2018:

This Proxy Statement and our 2017 Annual Report to Stockholders on Form 10-K are available for viewing, printing and downloading at www.proxyvote.com.

A copy of our Annual Report on Form 10-K for the fiscal year ended December 31, 2017, as filed with the SEC, except for exhibits, will be furnished without charge to any stockholder upon written request to AVEO Pharmaceuticals, Inc., One Broadway, 14th Floor, Cambridge, Massachusetts 02142, Attention: Corporate Secretary. Copies of exhibits, if any, are also available upon written request to the preceding address and upon the payment of an appropriate processing fee. This Proxy Statement and our Annual Report on Form 10-K for the fiscal year ended December 31, 2017 are also available on the SEC’s website at www.sec.gov.

IMPORTANT INFORMATION ABOUT THE ANNUAL MEETING AND VOTING

Q. Why did I receive these proxy materials?

A. We are providing these proxy materials to you, as a stockholder of record of AVEO Pharmaceuticals, Inc., in connection with the solicitation by our board of directors of proxies to be voted at our 2018 annual meeting of stockholders to be held at One Broadway, 5th Floor, Cambridge, MA 02142 on Monday, June 18, 2018 at 10:00 a.m., Eastern Daylight Time. As a stockholder of record of AVEO Pharmaceuticals, you are invited to attend our annual meeting and are entitled and requested to vote on the proposals described in this proxy statement.

Q. What is the purpose of the annual meeting?

A. At the annual meeting, stockholders will consider and vote on the following matters:

1. To elect five directors, each to serve for a one-year term expiring at our 2019 annual meeting of stockholders and until his successor is duly elected and qualified;
2. To approve a non-binding advisory vote on executive compensation; and
3. To ratify the appointment of Ernst & Young LLP as our independent registered public accounting firm for the year ending December 31, 2018.

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

Q. Who can vote at the annual meeting?

A. To be entitled to vote, you must have been a stockholder of record at the close of business on April 23, 2018, the record date for our annual meeting. There were 118,867,471 shares of our common stock outstanding and entitled to vote at the annual meeting as of the record date.

Q. How many votes do I have?

A. Each share of our common stock that you own as of the record date will entitle you to one vote on each matter considered at the annual meeting.

Q. How do I vote?

A. 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: Go to the website of our tabulator at www.proxyvote.com. Use the vote control number printed on the Notice (or your proxy card) to access your account and vote your shares. You must specify how you want your shares voted or your Internet vote cannot be completed and you will receive an error message. You must submit your Internet proxy before 11:59 p.m., Eastern Daylight Time, on June 17, 2018, the day before the annual meeting, for your Internet proxy to be valid and your vote to count. Your shares will be voted according to your instructions.

(2) By Telephone: Call 1-800-690-6903, toll free from the United States, Canada and Puerto Rico, and follow the recorded instructions. You will need to have the Notice (or your proxy card) in hand when you call. You must specify

how you want your shares voted and confirm your vote at the end of the call or your telephone vote cannot be completed. You must submit your telephonic proxy before 11:59 p.m., Eastern Daylight Time, on June 17, 2018, the day before the annual meeting, for your telephonic proxy to be valid and your vote to count. Your shares will be voted according to your instructions.

2

(3)By Mail: If you received a printed copy of the proxy materials, complete and sign your enclosed proxy card and mail it in the enclosed postage prepaid envelope to Vote Processing, c/o Broadridge, 51 Mercedes Way, Edgewood, NY 11717. Broadridge must receive the proxy card not later than June 17, 2018, the day before the annual meeting, for your mailed proxy to be valid and your vote to count. Your shares will be voted according to your instructions. If you return your proxy card but do not specify how you want your shares voted on any particular matter, they will be voted in accordance with the recommendations of our board of directors.

(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 are deemed to be the beneficial owner of your shares. The intermediary that actually holds the shares for you is considered the record holder for the purposes of voting at the meeting. As the beneficial owner, you have the right to instruct that intermediary as to how to vote the shares held in your account by following the instructions contained on the voting instruction card provided to you by that organization; such intermediary is required to vote the shares it holds on your behalf according to your instructions. The proxy materials, as well as voting and revocation instructions, should have been forwarded to you by the intermediary that holds your shares. To vote your shares, you will need to follow the instructions that such intermediary provides you. Many intermediaries solicit voting instructions over the Internet or by telephone.

If your shares are held in “street name,” you may also vote your shares in person at the meeting. To attend 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. To vote your shares held in street name at the meeting, you will also need to obtain a proxy card from the holder of record.

Q.Can I change my vote?

A.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)Submit a new proxy 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 Daylight Time, on June 17, 2018.

(2)Sign a new proxy and submit it by mail to Vote Processing, c/o Broadridge, 51 Mercedes Way, Edgewood, NY 11717 as instructed above. Broadridge must receive the proxy card no later than June 17, 2018. 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.

If your shares are held in “street name,” you may submit new voting instructions 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 proxy from the record holder of your shares as described in the answer to the question “How do I vote?” above.

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

A.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 bank, brokerage firm or other nominee may under certain circumstances vote your shares if you do not return your voting instructions. Banks, brokerage firms or other

3

nominees can vote customers' unvoted shares on discretionary matters, but your bank, brokerage firm or other nominee will not be allowed to vote your shares with respect to certain non-discretionary items. If you do not return voting instructions to your bank, brokerage firm or other nominee to vote your shares, your bank, brokerage firm or other nominee may, on discretionary matters, either vote your shares or leave your shares unvoted.

Your bank, brokerage firm or other nominee cannot vote your shares on any matter that is not considered discretionary. Proposal 1, the election of directors, and Proposal 2, a non-binding advisory vote on executive compensation, are not considered discretionary matters. If you do not instruct your bank, brokerage firm or other nominee how to vote with respect to these matters, your bank, brokerage firm or other nominee 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, brokerage firm or other nominee that indicates on its proxy that it does not have or did not exercise discretionary authority to vote on a particular matter. Proposal 3, the ratification of the appointment of our independent registered public accounting firm, is considered a discretionary matter, and your bank, brokerage firm or other nominee will be able to vote on this matter even if it does not receive instructions from you, so long as it holds your shares in its name. We encourage you to provide voting instructions to your bank, 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 bank, brokerage firm or other nominee about how to submit your voting instructions to them.

Q.How many shares must be represented to hold the annual meeting?

A.Our Second Amended and Restated Bylaws requires stockholders holding a majority of our shares outstanding as of the record date and entitled to vote to 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 other nominees who indicate on their proxies that they do not have authority to vote those shares on Proposals 1 and 2. If a quorum is not present, we expect to adjourn the annual meeting until we obtain a quorum.

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

A.Proposal 1—Election of Directors

The five 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 discretionary matter. Therefore, if your shares are held by your bank, brokerage firm or other nominee in "street name" and you do not provide voting instructions with respect to your shares, your bank, brokerage firm or other nominee cannot vote your shares on Proposal 1. Shares held in "street name" by banks, brokerage firms or other 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; or
- 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 Executive Compensation

Our board of directors is holding a non-binding advisory vote regarding the compensation of our named executive officers, as described in the “Executive and Director Compensation” section of this proxy statement, including the executive compensation tables and accompanying narrative disclosures therein. To approve Proposal 2, stockholders

4

holding a majority of the votes cast on the matter and voting FOR or AGAINST the proposal must vote FOR the proposal. Proposal 2 is not considered a discretionary matter. Therefore, if your shares are held by your bank, brokerage firm or other nominee in “street name” and you do not provide voting instructions with respect to your shares, your bank, brokerage firm or other nominee cannot vote your shares on Proposal 2. Shares held in “street name” by banks, brokerage firms or other nominees who indicate on their proxies that they do not have authority to vote the shares on Proposal 2 will not be counted as votes FOR or AGAINST the proposal and will also not be counted as votes cast or shares voting on the proposal. If you ABSTAIN from voting on Proposal 2, your shares will not be voted FOR or AGAINST the proposal and will also not be counted as votes cast or shares voting on the proposal. As a result, such “broker non-votes” and votes to ABSTAIN will have no effect on the outcome of Proposal 2.

The proposal is advisory and non-binding in nature, but our compensation committee and board of directors will take into account the outcome of the vote when considering future executive compensation arrangements.

Proposal 3—Ratification of Appointment of Independent Registered Public Accounting Firm

To approve Proposal 3, stockholders holding a majority of the votes cast on the matter and voting FOR OR AGAINST the proposal must vote FOR the proposal. Proposal 3 is considered a discretionary matter. Therefore, if your shares are held by your bank, brokerage firm or other nominee in “street name” and you do not provide voting instructions with respect to your shares, your bank, brokerage firm or other nominee may vote your unvoted shares on Proposal 3. If you ABSTAIN from voting on Proposal 3, your shares will not be voted FOR or AGAINST the proposal and will also not be counted as votes cast or shares voting on the proposal. As a result, “broker non-votes,” if any, and votes to ABSTAIN will have no effect on the outcome of Proposal 3.

Although stockholder approval of our audit committee’s appointment of Ernst & Young LLP as our independent registered public accounting firm for the year ending December 31, 2018 is not required, we believe that it is advisable to give stockholders an opportunity to ratify this appointment. If this proposal is not approved at the annual meeting, our audit committee will reconsider its appointment of Ernst & Young LLP as our independent registered public accounting firm for the year ending December 31, 2018.

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

A.Our board of directors recommends that you vote:

FOR the election of each of the five nominees to serve on our board of directors, each to serve for a one-year term expiring at our 2019 annual meeting of stockholders and until his successor is duly elected and qualified;

FOR the approval of the non-binding advisory vote on the compensation of our named executive officers; and

FOR the ratification of the selection of Ernst & Young LLP as our independent registered public accounting firm for the year ending December 31, 2018.

Q.Are there other matters to be voted on at the annual meeting?

A.We do not know of any other matters that may come before the annual meeting. 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.

Q.Where can I find the voting results?

A. We plan to report the voting results in a Current Report on Form 8-K filed with the SEC within four business days following the date of our annual meeting.

5

Q.What are the costs of soliciting these proxies?

A.We will bear the cost of soliciting proxies. In addition to solicitation by mail, our directors, officers and employees may solicit proxies by telephone, e-mail, facsimile and in person without additional compensation. We may reimburse banks, brokerage firms or other nominees holding stock in their names, or in the names of their nominees, for their expenses in sending proxies and proxy material to beneficial owners.

HOUSEHOLDING OF ANNUAL MEETING MATERIALS

Some banks, brokerage firms and other nominee record holders may be participating in the practice of “householding” proxy statements, annual reports, and notices of Internet availability. This means that only one copy of our materials, including the Notice of Internet Availability, may have been sent to multiple stockholders in your household. We will promptly deliver a separate copy of either document to you upon written or oral request to AVEO Pharmaceuticals, Inc., One Broadway, 14th Floor, Cambridge, Massachusetts 02142, Attention: Corporate Secretary, telephone: (617) 588-1960. If you want to receive separate copies of the proxy statement, annual report to stockholders, or notices of Internet availability in the future, or if you are receiving multiple copies and would like to receive only one copy per household, you should contact your bank, brokerage firm or other nominee record holder, or you may contact us at the above address and phone number.

OWNERSHIP OF OUR COMMON STOCK

Unless otherwise provided below, the following table sets forth information regarding beneficial ownership of our common stock as of March 31, 2018 by:

- each person, or group of affiliated persons, known to us to be the beneficial owner of 5% or more of the outstanding shares of our common stock;
- each of our current directors and director nominees;
- our principal executive officer, our principal financial officer and our other executive officers named in the Summary Compensation table below, whom collectively we refer to as our named executive officers; and
- all of our directors and executive officers as a group.

The number of shares of common stock beneficially owned by each person or entity is determined in accordance with the applicable rules of the SEC and includes voting or investment power with respect to shares of our common stock. The information is not necessarily indicative of beneficial ownership for any other purpose. Unless otherwise indicated, to our knowledge, all persons named in the table have sole voting and investment power with respect to their shares of common stock, except to the extent authority is shared by spouses under community property laws. The inclusion herein of any shares as beneficially owned does not constitute an admission of beneficial ownership.

The column entitled “Percentage of Shares Beneficially Owned” is based on a total of 118,867,471 shares of our common stock outstanding as of March 31, 2018. Except as otherwise set forth below, the address of each beneficial owner is c/o AVEO Pharmaceuticals, Inc., One Broadway, 14th Floor, Cambridge, Massachusetts 02142.

Name and Address of Beneficial Owner	Number of Shares Beneficially Owned	Common Stock Underlying Warrants Exercisable Within 60 Days	Common Stock Underlying Options Exercisable Within 60 Days	Total Securities Beneficially Owned	Percentage of Shares Beneficially Owned
Entity affiliated with New Enterprise Associates⁽¹⁾					
Polar Capital LLP ⁽²⁾	8,077,429	—	—	8,077,429	6.8%
Directors and Named Executive Officers					
Kenneth M. Bate	3,750	—	253,401	257,151	*
Anthony B. Evnin ⁽³⁾	1,565,482	129,533	243,401 ⁽⁴⁾	1,938,416	1.6%
John H. Johnson	—	—	8,324	8,324	*
Robert C. Young	18,958 ⁽⁵⁾	—	233,651	252,609	*
Michael Bailey	168,848	51,813	1,795,225	2,015,886	1.7%
Matthew D. Dallas	—	—	15,625	15,625	*
Keith Ehrlich ⁽⁶⁾	121,813	51,813	298,779	472,405	*
Michael Needle	51,813	51,813	638,686	742,312	*
Nikhil Mehta	—	—	4,687	4,687	*
All current executive officers and directors as a group (9 persons)⁽⁷⁾					
	1,808,851	233,159	3,350,706	5,392,716	4.4%

*Represents beneficial ownership of less than one percent of our outstanding common stock.

(1) The shares are directly held by Growth Equity Opportunities Fund IV, LLC, or GEO IV; and indirectly held by New Enterprise Associates 15, L.P., or NEA 15, the sole member of GEO IV; NEA Partners 15, L.P., or NEA Partners 15, the sole general partner of NEA 15; NEA 15 GP, LLC, or NEA 15 GP, the sole general partner of NEA Partners 15, and the individual managers of NEA 15 GP (NEA 15, NEA Partners 15, NEA 15 GP and the individual managers of NEA 15 GP being collectively referred to as the Indirect Reporting Persons). The individual managers of NEA 15 GP are Peter J. Barris, Forest Baskett, Anthony A. Florence, Jr., Josh Makower,

7

David M. Mott, Jon Sakoda, Scott D. Sandell, Peter W. Sonsini and Ravi Viswanathan. The Indirect Reporting Persons disclaim beneficial ownership within the meaning of Section 16 of the Securities Exchange Act of 1934, as amended, or otherwise of such portion of the shares held by GEO IV in which the Indirect Reporting Persons have no pecuniary interest. The address of GEO IV is New Enterprise Associates, 1954 Greenspring Drive, Suite 600, Timonium, MD 21093.

- (2) As reported on Schedule 13G (filed with the SEC on February 14, 2018) by Polar Capital, LLP. As of December 31, 2017, Polar Capital had sole dispositive power and voting power over 8,077,429 shares of common stock. The address of Polar Capital LLP is 16 Palace Street, London, SW1E 5JD.
- (3) Consists of (a) 206,452 shares of common stock held by Venrock Associates, or VA, (b) 917,569 shares of common stock held by Venrock Associates III, L.P., or VA III, (c) 22,938 shares of common stock held by Venrock Entrepreneurs Fund III, L.P., or VEF III, (d) 109 shares of common stock held by VEF Management III, LLC, or VEFM III and (e) 418,414 shares of common stock held directly by Anthony Evnin. Dr. Evnin is a General Partner of VA. Venrock Management III, LLC, or VM III, is the sole General Partner of VA III. VEFM III, is the sole General Partner of VEF III. Dr. Evnin is a Member of VM III and VEFM III and is a partner of VR Management, LLC, an affiliate of VA, VA III, VEF III, VM III and VEFM III. Dr. Evnin expressly disclaims beneficial ownership over all shares held by or on behalf of VA, VA III, VEF III, VM III, VEFM III and VR Management, LLC, except to the extent of his indirect pecuniary interest therein. VM III and VEFM III expressly disclaim beneficial ownership over all shares held by VA, VA III and VEF III, except to the extent of their indirect pecuniary interest therein. The address of Venrock is 530 Fifth Avenue, 22nd Floor, New York, New York 10036.
- (4) Includes 35,000 shares of common stock issuable upon exercise of options held by Dr. Evnin on behalf and for the sole benefit of VR Management, LLC.
- (5) Consists of (a) 17,958 shares of common stock held by Dr. Young, and (b) 1,000 shares of common stock held by Dr. Young's wife.
- (6) Mr. Ehrlich stepped down from the role of chief financial officer on June 1, 2017 and retired from the company effective June 30, 2017.
- (7) Reflects the retirement of Mr. Ehrlich effective June 30, 2017 and the designation of Karuna Rubin, our Senior Vice President and General Counsel, as an executive officer effective February 1, 2018.

SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Securities Exchange Act of 1934, as amended, or the Exchange Act, requires our directors, executive officers and the holders of more than 10% of our common stock to file with the SEC initial reports of ownership of our common stock and other equity securities on a Form 3 and reports of changes in such ownership on a Form 4 or Form 5. Executive officers, directors and 10% stockholders are required by SEC regulations to furnish us with copies of all Section 16(a) forms they file. Based solely on a review of our records and written representations by the persons required to file these reports, we believe that, during the year ended December 31, 2017, our executive officers, directors and 10% stockholders complied with all Section 16(a) filing requirements applicable to them except that Forms 4 for Mr. Bailey and Dr. Needle, due on June 23, 2017, were filed late on June 28, 2017.

PROPOSAL 1—ELECTION OF DIRECTORS

Our board is currently comprised of five members, and our board has set the size of our board at five pursuant to our certificate of incorporation and bylaws. The persons named in the accompanying proxy will vote to elect Messrs. Bailey, Bate and Johnson and Drs. Evnin and Young as directors unless you indicate otherwise on your proxy. Each of the nominees is currently a member of our board of directors.

If they are elected, each of the nominees will hold office until our annual meeting of stockholders in 2019 and until his successor is duly elected and qualified. Each of the nominees has indicated his willingness to serve, if elected; however, if any nominee should be unable to serve, the shares of common stock represented by proxies may be voted for a substitute nominee designated by our board of directors.

There are no family relationships between or among any of our officers or directors.

8

Below are the names, ages and certain other information regarding the business experience, qualifications, attributes and skills of each of the nominees for director. Information with respect to the number of shares of common stock beneficially owned by each of these individuals, directly or indirectly, as of March 31, 2018 appears above under the heading "Ownership of Our Common Stock."

Michael P. Bailey, age 52, has served as our President and Chief Executive Officer and as a director since January 6, 2015. Mr. Bailey joined our company in September 2010 as our Chief Commercial Officer and was named our Chief Business Officer in June 2013. Prior to joining our company, Mr. Bailey served as senior vice president, business development and chief commercial officer at Synta Pharmaceuticals Corp., a biopharmaceutical company focused on research, development and commercialization of oncology medicines, from August 2008 to September 2010. From 1999 to 2008, Mr. Bailey worked at ImClone Systems Incorporated, a biopharmaceutical company focused on the development and commercialization of treatments for cancer patients. During his nine-year tenure at ImClone, he was responsible for commercial aspects of the planning and launch of ERBITUX[®] (cetuximab) across multiple oncology indications, as well as new product planning for the ImClone development portfolio, which included CYRAMZA[®] (ramucirumab) and PORTRAZZA[®] (necitumumab). In addition, Mr. Bailey was a member of the strategic leadership committees for ImClone and its North American and worldwide partnerships and led its commercial organization, most recently as senior vice president of commercial operations. Prior to his role at ImClone, Mr. Bailey managed the cardiovascular development portfolio at Genentech, Inc., a biotechnology company, from 1997 to 1999. Mr. Bailey started his career in the pharmaceutical industry as part of Smith-Kline Beecham's executive marketing development program, where he held a variety of commercial roles from 1992 to 1997, including sales, strategic planning, and product management. Mr. Bailey received a B.S. in psychology from St. Lawrence University and an M.B.A. in international marketing from the Mendoza College of Business at the University of Notre Dame. We believe Mr. Bailey's qualifications to serve on our board of directors include his service as our chief executive officer and his significant experience in research and development for cancer and corporate strategy development, including his executive leadership roles at global pharmaceutical companies.

Kenneth M. Bate, age 67, has served as a director since December 2007. He is currently an independent consultant. Mr. Bate currently serves on the boards of Catabasis Pharmaceuticals, Inc., Vanda Pharmaceuticals Inc., Genocea Biosciences, Inc., Epizyme, Inc. and Madrigal Pharmaceuticals, Inc., each a public biopharmaceutical company. During the last five years, Mr. Bate also served as chairman of the board of Cubist Pharmaceuticals, Inc. and as a director of BioMarin Pharmaceutical Inc., each a public biopharmaceutical company. Previously, Mr. Bate was the president and chief executive officer of Archemix Corp., a private biopharmaceutical company, a position he held from April 2009 through December 2011. From 2006 to April 2009, he served in various positions at NitroMed, Inc., a public pharmaceutical company, most recently as president and chief executive officer. From 2002 to 2005, Mr. Bate served as head of commercial operations and chief financial officer at Millennium Pharmaceuticals, Inc., a biopharmaceutical company. Prior to joining Millennium Pharmaceuticals, Mr. Bate co-founded JSB Partners, LLC, a banking and advisory services firm for biopharmaceutical and life sciences companies. From 1990 to 1996, Mr. Bate was employed with Biogen, Inc., a public biotechnology company, first as its chief financial officer and then as head of the commercial organization responsible for launching its multiple sclerosis business. He holds a B.A. in Chemistry from Williams College and an M.B.A. from The Wharton School of the University of Pennsylvania. We believe Mr. Bate's qualifications to serve on our board of directors include his operating, finance, commercial, transactional and senior management experience in the industry, such as his experience as chief executive officer of Archemix and NitroMed, as head of commercial operations and chief financial officer at Millennium Pharmaceuticals, and as chief financial officer and vice president of sales and marketing at Biogen, as well as his experience serving on the board of directors of other public companies in the life sciences industry, such as Cubist Pharmaceuticals and BioMarin Pharmaceutical.

Anthony B. Evnin, Ph.D., age 77, has served as a director since March 2002. He has been a Partner at Venrock, a venture capital firm, where he focuses largely on life sciences investments and, in particular, biotechnology

investments, since 1975. Dr. Evnin currently serves on the boards of Infinity Pharmaceuticals, Inc. and Juno Therapeutics, Inc., both public biopharmaceutical companies, as well as Cantel Medical Corp., a public medical equipment company. He also serves on the board of Constellation Pharmaceuticals, Inc. and Bridge Medicines LLC, both private biopharmaceutical companies. During the last five years, Dr. Evnin served as a director of Altea Therapeutics Corporation, a private biopharmaceutical company, and Boston-Power, Inc., a private lithium-ion battery company. He has also served as a director of the following public biopharmaceutical companies: Acceleron

9

Pharma, Inc., Celladon Corporation, CymaBay Therapeutics, Inc., Icagen, Inc. and Pharmos Corporation. Dr. Evnin's previous experience was as a manager of business development at Story Chemical Corporation and a research scientist at Union Carbide Corporation. Dr. Evnin is a trustee emeritus of The Rockefeller University and of The Jackson Laboratory, trustee emeritus of Princeton University, a member of the Boards of Overseers and Managers of Memorial Sloan-Kettering Cancer Center, a director of the New York Genome Center, and a member of the board of directors of the Albert and Mary Lasker Foundation. Dr. Evnin holds a Ph.D. in Chemistry from the Massachusetts Institute of Technology and an A.B. from Princeton University. We believe Dr. Evnin's qualifications to sit on our board of directors include his substantial experience as an investor in, and director of, biopharmaceutical companies, including Infinity Pharmaceuticals, as well as his expertise in corporate strategy at a public biopharmaceutical company.

John H. Johnson, age 60, has served as a director since February 2018. Mr. Johnson currently serves as chairman of the board of Strongbridge Biopharma plc, and serves on the boards of Melinta Therapeutics, Inc. (formerly Cempra, Inc.), Portola Pharmaceuticals, Inc. and Histogenics Corporation, each a public biopharmaceutical company. During the last five years, Mr. Johnson served as a director of Sucampo Pharmaceuticals, Inc., a public biopharmaceutical company, until Sucampo's acquisition by Mallinckrodt plc, and as the chairman of the board of Tranzyme Pharma, Inc., a public biopharmaceutical company, until Tranzyme's business combination with Ocera Therapeutics, Inc. Mr. Johnson served as a director and as chairman of the board of Dendreon Corporation, a public biotechnology company, and also served as Dendreon's president and chief executive officer from January 2012 to August 2014. From January 2011 through January 2012, Mr. Johnson was the chief executive officer and a director of Savient Pharmaceuticals, Inc. From November 2008 until January 2011, he served as senior vice president and president of Eli Lilly & Company's Oncology unit following the Eli Lilly's November 2008 acquisition of ImClone Systems Incorporated, where he served as ImClone's chief executive officer and on its board of directors from August 2007 to November 2008. From 2005 to 2007, Mr. Johnson served as Company Group Chairman of Johnson & Johnson's Worldwide Biopharmaceuticals unit, President of its Ortho Biotech Products LP and Ortho Biotech Canada units from 2003 to 2005, and Worldwide Vice President of its CNS, Pharmaceuticals Group Strategic unit from 2001 to 2003. Prior to that role, Mr. Johnson held several executive positions at Parkstone Medical Information Systems, Inc., Ortho-McNeil Pharmaceutical Corporation and Pfizer Inc. Mr. Johnson received a Bachelor of Science degree from East Stroudsburg University of Pennsylvania. We believe Mr. Johnson's qualifications to serve on our board of directors include his substantial experience as an executive and director of multiple biopharmaceutical and other life sciences companies.

Robert C. Young, M.D., age 78, has served as a director since July 2009. Dr. Young is president of RCY Medicine, a consulting company focused on cancer center productivity, health care quality and health policy which he founded in July 2009. From 2007 to 2009, Dr. Young served as chancellor of Fox Chase Cancer Center and as president and chief executive officer from 1989 to 2007. Dr. Young is a past president of the American Society of Clinical Oncology (ASCO), the American Cancer Society and the International Gynecologic Cancer Society and past chairman of the board of scientific advisors of the National Cancer Institute and is past chairman of the National Comprehensive Cancer Network. Dr. Young serves as chairman of the editorial board of Oncology Times. Dr. Young served on the board of directors of West Pharmaceutical Services, Inc., a public pharmaceutical technology company, from July 2002 to May 2012, and on the board of directors of Human Genome Sciences, Inc., a biopharmaceutical company, from November 2005 to July 2012. During the last five years, Dr. Young has served as a member of the scientific advisory boards of the Kansas Cancer Center, the Indiana Cancer Center and the Ohio State Cancer Center. Dr. Young holds a B.Sc. in zoology from The Ohio State University and an M.D. from Cornell University Medical College and is board certified in Internal Medicine, Hematology and Medical Oncology. We believe that Dr. Young's qualifications to serve on our board of directors include his substantial experience in cancer research as head of the Fox Chase Cancer Center and as chairman of the board of scientific advisors of the National Cancer Institute as well as his prior role with the National Cancer Policy Board at the Institute of Medicine, his service as a member of the board of directors at public life sciences companies West Pharmaceutical Services and Human Genome Sciences, as well as his accomplished background as a board-certified physician.

Our board of directors recommends a vote “FOR” the election of each of the director nominees.

CORPORATE GOVERNANCE

General

We believe that good corporate governance is important to ensure that AVEO Pharmaceuticals 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, as well as charters for our audit committee, our compensation committee and our nominating and governance committee, and corporate governance guidelines. 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.aveooncology.com, which you can access free of charge. 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.

Board 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, Nasdaq Listing Rules require that, subject to specified exceptions, each member of a listed company's audit, compensation and nominating and governance committees be independent under the Securities Exchange Act of 1934, as amended, or the Exchange Act. Audit committee members also satisfy independence criteria set forth in Rule 10A-3 under the Exchange Act, and compensation committee members must also satisfy the independence criteria set forth in Rule 10C-1 under the Exchange Act. Under Rule 5605(a)(2), 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, a member of an audit committee of a listed company may not, other than in his or her capacity as a member of the audit committee, the board of directors, or any other board committee: (1) accept, directly or indirectly, any consulting, advisory, or other compensatory fee from the listed company or any of its subsidiaries; or (2) 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: (1) the source of compensation of the director, including any consulting, advisory or other compensatory fee paid by such company to the director; and (2) whether the director is affiliated with the company or any of its subsidiaries or affiliates.

In February 2018, 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 background, employment and affiliations, including family relationships, our board of directors determined that none of Mr. Bate, Dr. Evnin, Dr. Young, or Mr. Johnson, representing four of our five directors, has a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that each of these directors is "independent" as that term is defined under Rule 5605(a)(2) of the NASDAQ Listing Rules. Our board of directors also determined that Mr. Bate and Drs. Evnin and Young, who comprise our audit committee, Dr. Evnin, Mr. Bate and Mr. Johnson, who comprise our compensation committee, and Dr. Evnin, Dr. Young and Mr. Johnson, who comprise our nominating and governance committee, satisfy the independence standards for such committees established by the SEC and the NASDAQ Listing Rules, as applicable. Our board of directors had previously determined that Henri A. Termeer, who served on the board until his death in May 2017, was also independent, and that Dr. Young and Mr. Bate were independent while serving as members of the compensation committee and nominating and governance committee, respectively, from May 2017 to

February 2018. In making such determinations, the board of directors considered the relationships that each such non-employee director has with our company and other facts and circumstances the board of directors deemed relevant in determining independence, including the beneficial ownership of our capital stock by each non-employee director.

Role of the Board

Our board of directors is responsible for establishing broad corporate policies and reviewing our overall performance. The primary responsibility of our board is to oversee the management of our company and, in doing so, serve the best interests of the company and our stockholders. Our board selects, evaluates and provides for the succession of executive officers and, pursuant to recommendations by our nominating and governance committee and subject to stockholder election, selects directors. It reviews and approves corporate objectives and strategies, and evaluates significant policies and proposed major commitments of corporate resources. Our board also participates in decisions that have a potential major economic impact on our company. Management keeps our directors informed of company activity through regular communication, including written reports and presentations at board of directors and committee meetings.

Our board of directors has designated Mr. Bate, an independent director within the meaning of NASDAQ Listing Rules (see “Board Determination of Independence” above), to serve as our lead outside director of the board of directors. As lead outside director, Mr. Bate performs many of the same functions and duties as a chairman of the board. Pursuant to our Corporate Governance Guidelines, Mr. Bate’s duties as lead outside director include the following:

- chairing any meeting of the independent directors in executive session;
- meeting with any director who is not adequately performing his or her duties as a member of the board or any committee;
- facilitating communications between other members of the board and chief executive officer;
- coordinating the agenda for each board meeting and determining the need for special meetings of the board; and
- consulting with the chief executive officer on matters relating to corporate governance and board performance.

We do not currently have a designated chairman and do not have a policy as to whether the same person should serve as both the chief executive officer and the chairman of the board. However, we believe that the board should have the flexibility to make these determinations at any given time in a way that provides the most appropriate leadership for our company. Our board of directors has concluded that our current leadership structure is appropriate at this time. However, the board will continue to periodically review our leadership structure and may make such changes in the future as it deems appropriate.

The Board’s Role in Risk Oversight

We face a number of risks in our business, including risks related to: clinical research and development; regulatory reviews, approvals and oversight; intellectual property filings, prosecution, maintenance and challenges; the establishment and maintenance of strategic alliances; manufacturing; pricing and competition; the ability to access additional funding for our business; stockholder litigation; and other risks, including those described under the heading “Risk Factors” in our Annual Report on Form 10-K for the year ended December 31, 2017. Our management is responsible for the day-to-day management of the risks that we face, while our board of directors, as a whole and through its committees, has responsibility for the oversight of risk management.

Our board administers its risk oversight function directly and through its three committees. Our lead outside director meets regularly with our chief executive officer and other executive officers to discuss strategy and risks facing the company. Members of our executive management team attend at least quarterly board meetings and are available to address any questions or concerns raised by the board on risk management and other related matters. Each quarter, the board of directors receives presentations from members of senior management on strategic matters involving our business. In addition, the audit committee periodically discusses with management our risk exposures in the areas of financial reporting, internal controls and compliance with legal and financial regulatory requirements, their potential impact on our company and the steps we take to manage them. The compensation committee assists the board in

fulfilling its oversight responsibilities with respect to the management of risks arising from our compensation policies and programs. The nominating and governance committee assists the board in fulfilling its oversight responsibilities with respect to the management of risks associated with board organization, membership and structure, succession planning for our directors and executive officers, and corporate governance.

12

Board of Directors Meetings and Attendance

Our board met nine times during 2017 either in person or by teleconference. During 2017, each of our directors then in office attended at least 75% of the aggregate number of board meetings and meetings of the committees on which he then served.

Director Attendance at Annual Meeting of Stockholders

Our corporate governance guidelines provide that directors are responsible for attending annual meetings. Each of our then-current directors attended the 2017 annual meeting of stockholders.

Board Committees

Our board of directors has established standing audit, compensation, and nominating and governance committees, each of which operates under a written charter that has been approved by our board. Each such committee reviews its respective charter at least annually. The members of each committee are appointed by our board, upon recommendation of our nominating and governance committee.

Our board has determined that all of the members of each of these three standing committees satisfy the independence standards for such committees established by the SEC and the Nasdaq Listing Rules.

Audit Committee

The members of our audit committee are Kenneth Bate, Anthony Evnin and Robert Young. Mr. Bate chairs the audit committee. Our board of directors has determined that Mr. Bate is an “audit committee financial expert” as defined in applicable SEC rules. Our audit committee’s responsibilities include:

- appointing, approving the compensation of, and assessing the independence of the independent registered public accounting firm;
- overseeing the work of the independent registered public accounting firm, including through the receipt and consideration of reports from such firm;
- reviewing and discussing with management and the independent registered public accounting firm our annual and quarterly financial statements and related disclosures;
- monitoring our internal control over financial reporting, disclosure controls and procedures and code of business conduct and ethics;
- overseeing our internal audit function, if any;
- discussing our risk management policies;
- establishing policies regarding hiring employees from the independent registered public accounting firm and procedures for the receipt and retention of accounting-related complaints and concerns;
- meeting independently with our internal auditing staff, if any, independent 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.

Our audit committee met five times during 2017.

Compensation Committee

The members of our compensation committee are Kenneth Bate, Anthony Evnin, and John Johnson. Dr. Evnin chairs the compensation committee. Previously, Mr. Termeer had served on the compensation committee from January to May 2017, and Dr. Young served on the committee from May 2017 until Mr. Johnson joined the committee in February 2018. Our compensation committee's responsibilities include:

- annually reviewing and approving corporate goals and objectives relevant to our chief executive officer and our other executive officers' compensation;

13

- reviewing and making recommendations to our board with respect to the compensation of our chief executive officer;
- reviewing and approving, or making recommendations to our board with respect to, 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 annually with management our “Compensation Discussion and Analysis” disclosure required by SEC rules; and
- preparing the annual compensation committee report required by SEC rules.

The processes and procedures followed by our compensation committee in considering and determining executive compensation are described below under the heading “Executive and Director Compensation Processes.”

Our compensation committee met six times during 2017.

Nominating and Governance Committee

The members of our nominating and governance committee are Anthony Evnin, John Johnson and Robert Young. Dr. Young chairs the nominating and governance committee. From January - May 2017, Dr. Young and Mr. Termeer comprised the committee. In May 2017, the committee was increased from two to three members, and Dr. Evnin and Mr. Bate joined the committee. Mr. Bate served on the committee until Mr. Johnson joined the committee in February 2018. Our nominating and governance committee’s responsibilities include:

- identifying individuals qualified to serve as members of our board;
- recommending to our board the persons to be nominated for election as directors and to each of our board’s committees;
- reviewing and making recommendations to our board with respect to management succession planning;
 - developing and recommending to our board corporate governance guidelines;
- developing and recommending to our board continuing educational programs regarding corporate governance and other pertinent topics; and
- overseeing an annual evaluation of our board.

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

Our nominating and governance committee met two times during 2017.

Director Nomination Process

Our nominating and governance committee is responsible for identifying individuals qualified to serve as directors, consistent with criteria approved by our board, and recommending the persons to be nominated for election as directors, except where we are legally required by contract, law or otherwise to provide third parties with the right to nominate.

The process followed by our nominating and governance committee to identify and evaluate director candidates includes requests to board members and others for recommendations, meetings from time to time to evaluate biographical information and background material relating to potential candidates and interviews of selected candidates by members of the committee and our board.

At the annual meeting, stockholders will be asked to consider the election of John Johnson, who has been nominated for election as a director for the first time. During 2018, Mr. Johnson was appointed by our board as a new director. Mr. Johnson was originally proposed to the nominating and governance committee by the chief executive officer and our Board determined to include him among the nominees.

Criteria and Diversity

Our corporate governance guidelines specify that diversity on the board should be considered by the nominating and governance committee in the director identification and nomination process. In considering whether to recommend any particular candidate for inclusion in our board's slate of recommended director nominees, our nominating and governance committee will apply criteria that include the candidate's integrity, business acumen, knowledge of our business and industry, experience, conflicts of interest and ability to act in the interests of all stockholders. Our nominating and governance committee also considers issues of diversity, such as diversity of gender, race and national origin, education, professional experience and differences in viewpoints and skills. While our nominating and governance committee does not have a formal policy with respect to diversity, our board and nominating and governance committee believe that it is essential that the board members represent diverse viewpoints. The committee does not assign specific weights to particular criteria and no particular criterion is a prerequisite for each prospective nominee. We believe that the backgrounds and qualifications of our directors, considered as a group, should provide a composite mix of experience, knowledge and abilities that will allow our board to promote our strategic objectives and fulfill its responsibilities to our stockholders.

The director biographies appearing above under "Proposal 1—Election of Directors" indicate each nominee's experience, qualifications, attributes and skills that led our board to conclude that each director should serve as a member of our board. Our board believes that each of the nominees has had substantial achievement in his professional and personal pursuits, and possesses the background, talents and experience that our board desires and that will contribute to the best interests of our company and to long-term stockholder value.

Stockholder Nominations

Stockholders may recommend individuals to our nominating and governance committee for consideration as potential director candidates by submitting names of the proposed candidates, together with appropriate biographical information and background materials and, if the stockholder is not a stockholder of record, 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 the nominating and governance committee, c/o Karuna Rubin, Secretary, AVEO Pharmaceuticals, Inc., One Broadway, 14th Floor, Cambridge, Massachusetts 02142. Assuming that appropriate biographical and background material has been provided on a timely basis, 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. Stockholders also have the right under our bylaws to nominate director candidates directly, without any action or recommendation on the part of the committee or the board, by following the procedures set forth below under the heading "Stockholder Proposals."

Communicating with the Independent Directors

Our board of directors will give appropriate attention to written communications that are submitted by stockholders, and will respond if and as appropriate. The lead outside director, subject to advice and assistance from the Company's internal legal counsel, is primarily responsible for monitoring communications from stockholders and for providing copies or summaries to the other directors as he considers appropriate.

Communications are forwarded to all directors if they relate to important substantive matters and include suggestions or comments that the lead outside director considers to be important for the directors to know. In general, communications relating to governance and long-term corporate strategy are more likely to be forwarded than communications relating to ordinary business affairs and personal grievances.

Stockholders who wish to send communications on any topic to our board should address such communications to the board of directors, c/o Karuna Rubin, Secretary, AVEO Pharmaceuticals, Inc., One Broadway, 14th Floor, Cambridge, Massachusetts 02142.

Executive Officer and Director Compensation Processes

Our compensation committee has implemented an annual performance review program for our executives, under which annual performance goals are determined and set forth in writing at the beginning of each calendar year for the company as a whole and for each of our executive officers. Annual corporate goals are proposed by management and approved by our board at the beginning of each calendar year for the upcoming year. These corporate goals target the achievement of specific clinical, regulatory, corporate development and financial milestones. Annual individual goals focus on contributions that facilitate the achievement of the corporate goals and are set during the first quarter of each calendar year. Individual goals are proposed by management and approved by our compensation committee and board of directors. Annual salary increases, annual bonuses, and annual stock options granted to our executives are tied to the achievement of these corporate and individual performance goals.

During the first calendar quarter of each year, we evaluate individual and corporate performance against the written goals for the recently completed year. This process leads to recommendations by our chief executive officer for corporate and individual goal achievement, annual salary increases, annual stock option and restricted stock awards and bonuses, if any, for executive officers other than himself, which are then reviewed and approved by our compensation committee and our board of directors. Any awards under our annual cash incentive program to our chief executive officer are based solely on the achievement of our overall corporate goals.

Our compensation committee has delegated to our chief executive officer the authority to make stock option grants under our Second Amended and Restated 2010 Incentive Stock Plan to our employees (other than to any executive officer or any other individual our board of directors or compensation committee may specify from time to time), at exercise prices equal to the closing price of our common stock on the date of grant and subject to vesting provisions and other conditions specified by our compensation committee.

Our compensation committee has the authority to retain compensation consultants and other outside advisors to assist in the evaluation of executive officer compensation. During the year ended December 31, 2017, our compensation committee retained an independent compensation consultant, Radford, an Aon Hewitt company, or Radford, to assist the compensation committee in developing our executive compensation programs for 2017 and 2018.

Report of the Audit Committee

Our audit committee has reviewed our audited financial statements for the year ended December 31, 2017 and discussed them with our management and our independent registered public accounting firm, Ernst & Young LLP.

Our audit committee has also received from, and discussed with, Ernst & Young LLP various communications that Ernst & Young LLP is required to provide to our audit committee, including the matters required to be discussed by generally accepted auditing standards (including Public Company Accounting Oversight Board Auditing Standard No. 1301, Communications with Audit Committees).

In addition, Ernst & Young LLP provided our audit committee with the written disclosures and the letter required by applicable requirements of the Public Company Accounting Oversight Board regarding the independent registered public accounting firm's communications with the audit committee concerning independence, and the audit committee has discussed with the company's independent registered public accounting firm their independence.

Based on the review and discussions referred to above, our audit committee recommended to our board of directors that our financial statements audited by Ernst & Young LLP be included in our Annual Report on Form 10-K for the year ended December 31, 2017.

By the audit committee of the board of directors of AVEO Pharmaceuticals, Inc.

Kenneth Bate, Chair

Anthony Evinin

Robert Young

16

Principal Accountant Fees and Services

The following table summarizes the fees of Ernst & Young LLP, our independent registered public accounting firm, billed to us for each of the last two years.

Fee Category	2017	2016
Audit Fees ⁽¹⁾	\$788,000	\$619,000
Tax Fees ⁽²⁾	\$23,000	\$23,000
All Other Fees	—	—
Total Fees	\$811,000	\$642,000

(1) “Audit Fees” consist of fees for the integrated audit of our annual financial statements and the effectiveness of our internal control over financial reporting, the review of the interim financial statements included in our quarterly reports on Form 10-Q, and other professional services provided in connection with regulatory filings or engagements.

(2) “Tax Fees” consist of fees for tax advice and tax services primarily related to: (i) miscellaneous federal and state tax consulting, (ii) international tax consulting and (iii) tax compliance with domestic and foreign tax returns.

All such accountant services and fees were pre-approved by our audit committee in accordance with the “Audit Committee Pre-Approval Policies and Procedures” described below.

Audit Committee 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 independent registered public accounting firm. This policy generally provides that we will not engage our independent registered public accounting firm to render audit or non-audit services unless the service is specifically approved in advance by our audit committee.

From time to time, our audit committee may pre-approve specified types of services that are expected to be provided to us by our independent registered public accounting firm during the next twelve 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.

CERTAIN RELATIONSHIPS AND RELATED PERSON TRANSACTIONS

Policies and Procedures for Related Person Transactions

Our board of directors has 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 respective 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 corporate counsel. The policy calls for the proposed related person transaction to be reviewed and, if deemed appropriate, approved by the audit committee of our board of directors. 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 audit 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 audit 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 unaffiliated 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 audit 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 the best interests of the company. The audit 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 a director or 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 his or her 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, and (c) the amount involved in the transaction equals less than the greater of \$200,000 or 5% of the annual consolidated gross revenues of the entity receiving payment under the transaction; or
- transactions that involve compensation (a) to an executive officer if the compensation has been approved, or recommended to the Board of Directors for approval, by our compensation committee or a group of independent directors of the company performing a similar function, or (b) to a director for services as a director of the company if such compensation will be reported pursuant to applicable securities laws; or
- a transaction that is specifically contemplated by provisions of our charter or bylaws.

The 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.

Related Person Transactions

On March 31, 2017, we completed a public offering of 34,500,000 shares of our common stock, including the exercise in full by the underwriter of its option to purchase 4,500,000 shares at the public offering price of \$0.50 per share, with total gross proceeds to us of \$17,250,000. Anthony Evnin, a member of our board of directors, and an entity affiliated with New Enterprise Associates, one of our 5% stockholders, participated in the public offering. Dr. Evnin purchased 250,000 shares at a total cost of \$125,000. The affiliate of New Enterprise Associates purchased 6,000,000 shares at a total cost of \$3,000,000. In accordance with our related person transaction policy, their participation in the underwritten public offering was approved by the audit committee in connection with the offering.

EXECUTIVE AND DIRECTOR COMPENSATION

Compensation Discussion and Analysis

Our approach to executive compensation is guided by the following principles:

- holding our executive officers accountable for results over the long term and maintaining integrity in all of the business dealings of our executive officers;
- rewarding our executive officers for consistently strong execution; and
- establishing a clear connection between rewards and performance.

These principles underlie our compensation program and, indeed, our entire culture. We seek to achieve financial strength by, among other things, linking compensation to performance goals, by using equity as a key component of compensation, and by continually reviewing and monitoring our compensation program.

Executive Summary

We are a biopharmaceutical company dedicated to advancing a broad portfolio of targeted medicines for oncology and other areas of unmet medical need. A key element of our corporate strategy is to retain North American rights to our oncology portfolio while securing partners in development and commercialization outside of North America. We are working to develop and commercialize our lead candidate tivozanib in North America as a treatment for renal cell carcinoma, or RCC. We have entered into partnerships to fund the development and commercialization of our preclinical and clinical stage assets, including AV-203 and ficlatuzumab in oncology and AV-380 in cachexia. Tivozanib (FOTIVDA[®]), which we have outlicensed outside of North America, is approved in the European Union, as well as Norway and Iceland, for the first-line treatment of adult patients with advanced RCC, or aRCC, and for adult patients who are vascular endothelial growth factor receptor, or VEGFR, and mTOR pathway inhibitor-naïve following disease progression after one prior treatment with cytokine therapy for aRCC. We are currently seeking a partner to develop our AV-353 platform, a preclinical asset, worldwide for the potential treatment of pulmonary arterial hypertension, or PAH. We have used the proceeds from our partnerships, along with the proceeds of equity and debt financings completed in 2015-2017, to fund the clinical development of tivozanib and to advance our other programs.

In January 2015, our board of directors implemented a company-wide restructuring designed to provide for the advancement of our product candidates and to increase stockholder value. When making compensation decisions for the period from 2016 to present, the compensation committee has considered the continuing impact of the January 2015 restructuring, the need to retain key executives and our historically low stock price. The compensation committee has focused on retaining and incentivizing our key employees in ways that we believe are both meaningful to the employees, as well as aligned with the interests of our stockholders, including providing our executive officers with annual cash incentive bonuses and equity awards that are dependent on individual and corporate performance, as further described below. In setting compensation for 2018, the compensation committee has continued to focus on ensuring that executive compensation is in line with our peers in order to retain our management team and motivate them to continue to advance our pipeline.

At our 2017 annual meeting, we conducted an advisory vote on executive compensation. Approximately 98% of the votes cast were voted “FOR” approval of our executive compensation program as described and disclosed in the Compensation Discussion and Analysis section, compensation tables and narrative discussion in our 2017 proxy statement. The compensation committee considered the results of this advisory vote, together with the other factors and data discussed in this proxy statement, in determining executive compensation decisions and policies, and believes the result affirms stockholders’ support of the company’s approach to and structure of executive compensation. The compensation committee will continue to consider the outcome of the company’s say-on-pay votes when making

future compensation decisions for our named executive officers.

19

Our Compensation Program Emphasizes Performance

We believe that the compensation of our named executive officers for 2017 was well-aligned with our executive compensation objectives and with our performance for the following reasons:

• We provide cash bonuses that are 100% dependent upon the company's and individual's performance goals. The cash bonus portion of our named executive officer's compensation is not guaranteed and is totally at risk. We ensure that the performance goals underlying the cash bonuses are aggressive, aligned with stockholders' interest and results driven. Therefore, if AVEO or an individual does not perform at a level of excellence, the cash bonus can be, and has been on occasion, zero.

• We deliver a significant portion of our named executive officer target total direct compensation in the form of long-term incentive equity awards. Over the past several years, a significant portion of the total target value of the three primary elements of named executive officer compensation—base salaries, annual cash incentive awards and equity awards—was delivered in the form of long-term equity awards. The amounts disclosed in the executive compensation tables in this proxy statement generally reflect the grant-date fair value of stock option awards, but the actual economic value of stock option awards depends directly on the performance of our stock price over the period during which the awards vest and the period during which stock options may be exercised. Therefore, if stockholder value decreases over time, so does the value of the stock compensation. Our executive officers will only realize value when our stock price, and consequently stockholder value, increases.

• We aim to attract and retain exceptional executives in an extremely competitive market. In making its recommendation and decisions, the compensation committee reviewed market and peer data, which includes competitive information relating to the mix and levels of compensation for executives in the life science industry. The compensation committee also considers the need to retain key executives and reward those executives who continued to perform at a high level through 2017.

Overview of our Executive Compensation

The following section discusses the principles underlying our policies and decisions with respect to the compensation of our executive officers who are named in the "Summary Compensation Table for the Years Ended December 31, 2017, 2016, and 2015", which we refer to as our "named executive officers", and the most important factors relevant to an analysis of these policies and decisions.

Under applicable SEC rules, our named executive officers for 2017 were:

- Michael Bailey, our president and chief executive officer;
- Matthew Dallas, our chief financial officer;
- Keith Ehrlich, our former chief financial officer through June 1, 2017;
- Michael Needle, our chief medical officer; and
- Nikhil Mehta, our senior vice president of regulatory and quality assurance

Our compensation committee is responsible for establishing and administering our policies governing the compensation for our named executive officers, including salaries, cash incentives and equity incentive compensation. Our compensation committee consists of three non-employee independent directors of our board, all of whom have extensive experience in our industry. Our compensation committee considers the recommendations of our chief executive officer when determining the appropriate mix of compensation for each of our executive officers, including our named executive officers. Our chief executive officer, however, does not participate in the determination of his own compensation. Although our compensation committee is empowered to approve the salaries, cash incentives and equity incentive compensation of certain of our named executive officers, (i) the members of our board of directors approve the salary, cash incentive and equity incentive compensation of our chief executive officer, based on the recommendation of the compensation committee, and (ii) the compensation committee typically requests that the members of our board of directors approve the salaries, cash incentives and equity incentive compensation of all of

our other named executive officers based on the compensation committee's recommendation.

20

We believe that the compensation of our named executive officers should be designed to focus executive behavior on the achievement of short-term corporate goals as well as long-term business objectives and strategies. We place significant emphasis on pay-for-performance compensation programs, which reward our executives when we achieve certain specific regulatory, clinical, corporate development and financial milestones, thereby creating stockholder value. We use a combination of base salary, annual cash incentive compensation programs, a long-term equity incentive compensation program and a broad-based benefits program to create a competitive compensation package for our executive officers.

Objectives of our Executive Compensation Program

Our compensation committee has designed our overall executive compensation program to achieve the following objectives:

- attempt to attract and retain talented and experienced executives;
- motivate and reward executives whose knowledge, skills and performance are critical to our success;
- provide a competitive compensation package that aligns the interests of our named executive officers and stockholders by including a significant variable component which is weighted heavily toward performance-based rewards;
- ensure fairness among executive officers by recognizing the contributions each executive makes to our success; and
- foster a shared commitment among executives by aligning their individual goals with our corporate goals and the creation of stockholder value.

Basis for Compensation Policies and Decisions

We use a mix of short-term compensation, consisting of base salaries and cash incentive awards, and long-term compensation, consisting of equity incentive compensation, to provide a total compensation structure that is designed to achieve our objectives.

In arriving at the amount and types of initial compensation for each of our named executive officers, we consider the following factors:

- the individual's particular background and circumstances, including prior relevant work experience and compensation paid prior to joining us and the uniqueness of the individual's skills within the industry;
- the individual's role with us and the compensation paid to similar persons in the companies represented in the compensation data that we review (as further discussed below);
- the demand for people with the individual's specific expertise and experience at the time of hire;
- performance goals and other expectations for the individual's position;
- comparison to other executives within our company having similar levels of expertise and experience; and
- recommendations from our independent compensation consultant.

We reassess annually the compensation of our named executive officers and determine whether any adjustments should be made. In determining whether to adjust the compensation of any of our named executive officers, we generally take into account the following factors:

- formal market data regarding base salary, cash incentives and equity compensation from a leading life science compensation survey of comparable biopharmaceutical and biotechnology companies;
- the roles and responsibilities of our executives, including any increases or decreases in responsibilities; and
- the contributions and performance of each named executive officer.

In making certain compensation decisions during 2017 and for 2018, the compensation committee also considered our recent restructurings and continued transitional stage, the need to retain key executives and our stock price.

Our compensation committee retained an independent compensation consultant, Radford, to assist the compensation committee in developing our overall executive compensation programs for 2017 and 2018.

To assist in determining executive compensation in 2017, Radford and the compensation committee reviewed competitive market data from the 2016 Radford Global Life Sciences Survey of public biopharmaceutical companies with less than 200 employees and with a market value below \$500 million, which we refer to as the 2016 Radford Global Life Sciences Survey. The survey included data from companies in the life sciences industry which the compensation committee believes are generally comparable to our company and against which the compensation committee believes we compete for executive talent.

To assist in determining executive compensation in 2018, Radford and the compensation committee reviewed a peer group, which we refer to as the 2018 peer group, of publicly traded companies in the life sciences industry at a stage of development, market capitalization, geography and size comparable to ours, which companies the compensation committee believed were generally comparable to our company and against which the compensation committee believed we competed for executive talent. The compensation committee, in consultation with members of the Radford team, included the following companies in the 2018 peer group:

Advaxis	Karyopharm Therapeutics	Syros Pharmaceuticals
Aldeyra Therapeutics	Kura Oncology	Tetraphase Pharmaceuticals
Atara Biotherapeutics	Mirati Therapeutics	TG Therapeutics
Calithera Biosciences	Paratek Pharmaceuticals	Verastem
Ignyta	Rigel Pharmaceuticals	ZIOPHARM Oncology
ImmunoGen	Syndax Pharmaceuticals	

In addition to the publicly available information with respect to our 2018 peer group companies, Radford gathered competitive market data from the 2017 Radford Global Life Sciences Survey of public biopharmaceutical companies with less than 100 employees and a market value between \$140 million and \$1.3 billion, which we refer to as the 2017 Radford Global Life Sciences Survey, for our analysis of executive compensation in 2018.

Our compensation committee has concluded that our executive compensation program is effectively designed in light of our objectives and continues to be aligned with the interests of our stockholders and therefore determined not to make significant changes to the structure of our executive compensation program in 2018.

In 2018, we are focused on continuing to execute the new corporate strategy defined in 2015, and significantly advanced in 2016 and 2017, for clinical and regulatory development of our pipeline. In setting compensation for 2018, the compensation committee focused on ensuring that compensation was in line with our peers in order to retain and motivate our management team.

The Chief Executive Officer's Role in the Compensation Process

The compensation committee has historically used, in addition to its own judgment and experience, and the resources and tools described above, the recommendations of our chief executive officer as to the performance of each executive and as to the amount and type of compensation for such executive. Mr. Bailey, our chief executive officer, did not participate in the determination of his compensation for 2017 or 2018.

Risk Considerations in our Compensation Program

Our compensation committee has discussed the concept of risk as it relates to our executive compensation program, and our compensation committee does not believe our executive compensation program encourages excessive or inappropriate risk taking. As described more fully below in “Executive Compensation Components,” we structure our pay to consist of both fixed and variable compensation to motivate our executives to produce superior short- and long-term results that are in our best interests and the best interests of our stockholders and that have the greatest potential to increase stockholder value. We have reviewed our compensation policies and programs with our

compensation and audit committees and have concluded that any risks arising from our compensation policies and programs are not reasonably likely to have a material adverse effect on our company or business.

Executive Compensation Components

Our executive compensation program is primarily comprised of:

- base salary;
- annual cash incentive compensation; and
- equity compensation.

Our compensation committee has not adopted a formal policy for allocating between long-term and short-term compensation, between cash and non-cash compensation or among the different forms of non-cash compensation. Instead, the compensation committee, after reviewing information provided by our compensation consultant, determines what it believes to be the appropriate and competitive 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. While we believe that the annual incentive cash component of our compensation package encourages our executives to focus on our short-term performance, generally over a one-year period, we rely upon equity-based awards to encourage focus on our longer-term performance. In addition, we provide our executives with benefits that are available to all of our salaried employees, including medical, dental, group life and accidental death, dismemberment and long-term and short-term disability insurance, and matching contributions in our 401(k) plan.

Base Salary. Base salary is used to recognize the experience, skills, knowledge and responsibilities required of all our employees, including our named executive officers. Generally, we believe that executive base salaries should be targeted near the median of the range of salaries for executives in similar positions at comparable companies. When establishing base salaries for 2017 and 2018, the independent members of our board of directors, upon the recommendation of our compensation committee, considered the overall economic environment, the degree to which the company achieved its business goals and objectives, the need to attract, motivate and retain key executives, and each individual's performance. In addition, with respect to the base salaries of our named executive officers in 2017 and 2018, other than Mr. Bailey, our compensation committee considered the recommendations of Mr. Bailey in determining appropriate base salary levels.

2017 Base Salaries

In February 2017, the independent members of our board of directors, on the recommendation of the compensation committee, decided to increase the base salary of each of our named executive officers for 2017 as set forth in the table below. Our compensation committee made its recommendation based on the continued progress of the company and substantial achievements of the executive officers in 2016, as well as its analysis of executive officer pay from the 2016 Radford Global Life Sciences Survey. Given the continued strong performance of the executive team in 2016, salary increases for 2017 were made to keep pace with the 50th percentile of comparable companies in the 2016 Radford Global Life Sciences Survey, as recommended by Radford, in order to keep the company competitive with its peers in executive compensation. Similarly, our compensation committee recommended, and

our board approved, base salaries in line with general industry trends for Mr. Dallas and Dr. Mehta upon their joining the company. The 2017 base salaries for our named executive officers were as follows:

Name	2017 Annual Base Salary (\$)	Percentage Increase in Base Salary From 2016 Base Salary (%)
Michael Bailey	479,655	8.0%
Matthew Dallas ⁽¹⁾⁽²⁾	320,000	N/A
Keith Ehrlich ⁽³⁾	324,473	3.5%
Michael Needle	421,814	3.5%
Nikhil Mehta ⁽²⁾⁽⁴⁾	419,999	N/A

(1)Mr. Dallas joined the company as its chief financial officer, effective June 1, 2017.

(2)Base salary for this officer reflects initial salary upon joining the company.

(3)Mr. Ehrlich retired from the company, effective June 30, 2017.

(4)Dr. Mehta joined the company as its senior vice president of regulatory and quality assurance, effective November 20, 2017.

2018 Base Salaries

In February 2018, the independent members of our board of directors, on the recommendation of the compensation committee, decided to increase the base salary of each of our named executive officers for 2018 as set forth in the table below. Our compensation committee made its recommendation based on the continued progress of the company and substantial achievements of the executive officers in 2017, as well as its analysis, with input from Radford, of executive officer pay for the 2018 peer group companies described above and the 2017 Radford Global Life Sciences Survey. Given the continued strong performance of the executive team in 2017, salary increases for 2018 were made to keep pace with the 50th percentile of comparable companies in the 2018 peer group and the 2017 Radford Global Life Sciences Survey, as recommended by Radford, in order to keep the company competitive with its peers in executive compensation. The 2018 base salaries for our named executive officers are as follows:

Name	2018 Annual Base Salary (\$)	Percentage Increase in Base Salary From 2017 Base Salary (%)
Michael Bailey	\$527,621	10.0%
Matthew Dallas	\$352,000	10.0%
Michael Needle	\$436,578	3.5%
Nikhil Mehta ⁽¹⁾	\$419,999	—%

(1)Dr. Mehta joined the company as its senior vice president of regulatory and quality assurance, effective November 20, 2017, and is not eligible for a salary increase until 2019.

Annual Cash Incentive Program. We have designed our annual cash incentive program to reward our named executive officers who continue to provide service to the company upon the achievement of specified annual corporate and, for our named executive officers other than our chief executive officer, individual goals which are approved in advance by our compensation committee and board of directors. Our cash incentive program emphasizes pay-for-performance and is intended to closely align executive compensation with achievement of specified operating results as the cash incentive amount is calculated on the basis of the percentage of individual or corporate goals achieved, respectively. The compensation committee communicates the cash incentive award criteria to such executive officers at the beginning of each fiscal year. The performance goals established by the compensation committee are based on the business strategy of the company and the objective of building stockholder value. There are three steps for determining whether, and the extent to which, an annual cash incentive award is payable to such executive officer.

First, at the beginning of the fiscal year, the compensation committee determines the target annual cash incentive award for such executive officer based on a percentage of the officer's annual base salary for that year. Second, at the beginning of the fiscal year, the compensation committee establishes the specific performance goals that must be met in order for the officer to receive the award and the related weighting of each goal. Third, shortly after the end of the fiscal year, the compensation committee determines the extent to which these performance goals were met and the amount of the award. The independent members of the

board of directors consider, and if they deem appropriate, approve, the recommendation of the compensation committee with respect to each of these steps.

2017 Cash Incentive Program

In February 2017, our board of directors, upon the recommendation of our compensation committee, established a target cash incentive payment for each of our named executive officers based on a percentage of their 2017 annual base salary as set forth below. These target cash incentive payments were based on the target cash incentives comparable for similar executives in the 2016 Radford Global Life Sciences Survey. In addition, our board established corporate goals under the annual cash incentive award program for the year ending December 31, 2017. To reward the management team for the significant achievements of our company that led to an increase in the company's market value of over 400% in 2017, including the receipt of marketing approval of tivozanib in Europe and substantial improvement in our company's financial position, the board determined on February 1, 2018 to award the achievement of the corporate goals at 140% of their aggregate target level. The goals as achieved in 2017 are set forth below:

	Target Score	Actual Score
2017 Corporate Goals	(%)	(%)
Financial	30%	55% ⁽¹⁾
<ul style="list-style-type: none"> Secure funding that extends the cash runway into the second quarter of 2018 		
Tivozanib	45%	55% ⁽²⁾
<ul style="list-style-type: none"> Support EUSA in its MAA progress and potential launch preparation activities; achieve EU approval for tivozanib Complete enrollment of the TIVO-3 trial on a timeline that would be expected to enable top line progression free survival (PFS) data by the first quarter of 2018 Successfully complete phase 1 portion of the TiNivo combination trial; enroll phase 2 portion of the trial 		
Ficlatuzumab	5%	10% ⁽³⁾
<ul style="list-style-type: none"> Identify and fund additional clinical development opportunities 		
Business Development / Alliance Management	15%	10% ⁽⁴⁾
<ul style="list-style-type: none"> Finalize a partnership for our AV-353 platform Achieve a milestone in either the AV-203 or AV-380 partnerships 		
Corporate	5%	10% ⁽⁵⁾
<ul style="list-style-type: none"> Successfully manage class action litigation 		

Total

100%

140%

- (1) Financial Runway: In 2017 we secured funding that extended our cash runway from the fourth quarter of 2017 to the first quarter of 2019, more than double the increase required to achieve the corporate goal. This was achieved through completion of a private placement, satisfaction of the product development conditions required to draw down additional principal under our term loan with Hercules Capital, sales of stock under our at-the-market facility, securing of milestones and other funding under our partnership with EUSA Pharma and the refinancing of our \$20.0 million debt facility with Hercules Capital, Inc. The terms of the debt refinancing enabled approximately \$12.1 million in additional cash flow over 2018 and 2019, when compared to the prior loan, due to an initial interest-only period of 12 months. Additional amendments to the loan agreement lowered the interest rate, eliminated a \$10 million cash covenant and provide for the potential of a further interest only period under certain conditions.
- (2) Tivozanib Development: The European Commission granted marketing approval for tivozanib (FOTIVDA®) in Europe to our partner EUSA Pharma in August 2017. We assisted EUSA Pharma throughout the application process, including in the preparation of the application, response to questions from the EMA and at oral argument before the scientific committee of the European Medicines Agency, Committee for Medicinal

25

Products for Human Use. We successfully completed phase 1 of the TiNivo trial and presented data at the Kidney Cancer Symposium in November 2017, and we also completed phase 2 enrollment in 2017. In addition, enrollment in the TIVO-3 trial was completed two months ahead of schedule, satisfying the corporate goal.

(3) Ficlatusumab Development: In 2017 we furthered the development of ficlatuzumab in three indications - squamous cell carcinoma of the head and neck, acute myeloid leukemia and pancreatic cancer. We and our partner Biodesix funded two investigator-initiated phase 2 trials in 2017, one in squamous cell carcinoma of the head and neck and one in acute myeloid leukemia, following presentation of phase 1 data for both trials at the 2017 ASCO Annual Meeting. In addition, we and Biodesix are funding an investigator-sponsored clinical trial of ficlatuzumab in combination with nab-paclitaxel and gemcitabine in pancreatic cancer that was initiated in December 2017.

(4) AV-203 and AV-353: Our licensee CANbridge successfully completed the manufacturing technology transfer process for AV-203 in 2017, triggering a \$1 million milestone payment to us. In addition, we completed a new manufacturing run of AV-353 that enabled potential partners to perform additional preclinical testing of the drug as part of their diligence. However, our board of directors determined that the goal was not fully achieved as we did not enter into a partnership for AV-353.

(5) Securities Litigation: In December 2017, we entered into a binding memorandum of understanding, subject to final court approval, to settle the securities class action litigation which had been initiated in 2013.

For 2017, the individual goals for each of our named executive officers (other than our chief executive officer) accounted for 20% of his performance incentive. The cash incentive payment for our chief executive officer is based solely on the achievement of our overall corporate goals described above. The individual goals for our other named executive officers are primarily related to the corporate goals for which they are most responsible and, to a lesser extent, individual development goals or department specific goals, subject to discretionary adjustments that our compensation committee deems appropriate. Our chief executive officer makes recommendations to the compensation committee as to the degree to which those named executive officers have satisfied their individual goals.

Mr. Ehrlich's and Mr. Dallas' 2017 goals related to leading the financial, IT and facilities groups; assuring corporate financial compliance and reporting; managing our financial resources; achieving financing goals and optimizing analyst relations.

Dr. Needle's 2017 goals related to leading the clinical organization; acting as our clinical representative in interactions with investors, key opinion leaders, cooperative groups and partners to advance tivozanib development; achieving enrollment goals for our TIVO-3 phase 3 study and TiNivo phase 1/2 PD-1 combination study and advancing development of ficlatuzumab.

Dr. Mehta's 2017 goals related to initiating development of a 2018 plan for the preparation and filing of a NDA to the FDA for tivozanib and validation of the company's manufacturing process and plans.

Name	2017 Target Annual Cash Incentive Award(\$)	Cash Incentive Award Paid for 2017 (\$) ⁽¹⁾	Cash Incentive Award as a Percentage of Target Cash Incentive Award (%)
Michael Bailey	\$263,810	\$369,334	140%
Matthew Dallas ⁽²⁾	\$75,047	\$103,564	138%
Keith Ehrlich ⁽³⁾	—	—	—
Michael Needle	\$168,726	\$222,718	132%
Nikhil Mehta ⁽⁴⁾	\$19,331	\$25,518	132%

(1) The cash incentive awards for the year ended December 31, 2017 were paid in February 2018.

(2) Mr. Dallas joined the company as its chief financial officer, effective June 1, 2017. His 2017 target annual cash incentive award was prorated for the remainder of 2017 based upon his start date.

26

(3) Mr. Ehrlich retired from the company effective June 30, 2017 and, accordingly, was not eligible to participate in the 2017 annual cash incentive award.

(4) Dr. Mehta joined the company as its senior vice president of regulatory and quality assurance, effective November 20, 2017. His 2017 target annual cash incentive award was prorated for the remainder of 2017 based upon his start date.

2018 Cash Incentive Program

In February 2018, the compensation committee established a target cash incentive payment for each of our named executive officers based on a percentage of their 2018 annual base salary as set forth below. These target cash incentive payments were based on the target cash incentives comparable for similar executives in the 2017 Radford Global Life Sciences Survey. To arrive at the competitive market data, Radford blended this broad life sciences survey data with peer survey data from the 2018 peer group set at levels that approximated the 50th percentile of target executive cash incentive compensation at those companies.

Name	2018 Annual Base Salary (\$)	Target Percentage of 2018 Annual Base Salary (%)	2018 Target Annual Cash Incentive Award (\$)
Michael Bailey	\$527,621	55%	\$290,192
Matthew Dallas	\$352,000	40%	\$140,800
Michael Needle	\$436,578	40%	\$174,631
Nikhil Mehta	\$419,999	40%	\$168,000

In February 2018, our board of directors, upon the recommendation of our compensation committee, established the following corporate goals under the annual cash incentive award program for the year ending December 31, 2018, as set forth below:

2018 Corporate Goals	Percentage of Annual Cash Incentive Award Attributable to Corporate Goals
Financial	
<ul style="list-style-type: none"> Raise funds through partnership and/or financing to secure funding into 2020 	25%
Tivozanib (TIVO-3 Success)	
<ul style="list-style-type: none"> Submit NDA by the end of the year Positive TiNivo study that enables initiation of new value-creating immunotherapy combination study (RCC or HCC) 	55%
Pipeline	
<ul style="list-style-type: none"> Meet end-of-year enrollment goals for ficlatuzumab SCCHN study 	5%
Business Development / Alliance Management	10%
<ul style="list-style-type: none"> Successful monetization of AV-353 	

- Achieve AV-203 development milestone

Corporate

• Secure new facilities (as appropriate)	5%
Total	100%

TIVO-3 Kicker

• Positive TIVO-3 data (PFS statistically significant and positive OS trend)	1.5X
--	------

The corporate goals will account for 80% of the annual cash incentive opportunity for our executive officers (other than our chief executive officer). The cash incentive payment for our chief executive officer will be based solely on the achievement of our overall corporate goals described above. In addition to the overall corporate goals described

above, the performance of each executive officer will be measured against the achievement of certain individual goals. For 2018, the individual goals for each of our named executive officers (other than our chief executive officer) will account for 20% of such executive officer's annual cash incentive opportunity. Our compensation committee has the authority to make discretionary adjustments to our annual cash incentive program, including the ability to make additional awards based on our named executive officers' performance and to modify the corporate and individual performance targets and the level of awards that our named executive officers receive in conjunction with their performance against the targets. The compensation committee did not make any such adjustments for 2017.

For 2018, Mr. Dallas's goals related to leading the financial, IT and facilities groups; assuring corporate financial compliance and reporting; managing our financial resources; achieving financing goals and optimizing analyst relations.

For 2018, Dr. Needle's goals related to leading the clinical group; acting as our clinical representative in interactions with investors, key opinion leaders, cooperative groups and partners to advance tivozanib development; achieving enrollment goals for our TIVO-3 phase 3 study and TiNivo phase 1/2 PD-1 combination study and advancing development of ficlatuzumab.

For 2018, Dr. Mehta's goals relate to leading the regulatory, quality and CMC groups; leading the submission of an NDA application to the FDA for tivozanib in the event of positive TIVO-3 data and ensuring a tivozanib commercial supply.

Equity Compensation. We use stock options, including performance-based options, as well as other equity-based compensation to attract, retain, motivate and reward our named executive officers. Through our equity-based grants, we seek to align the interests of our named executive officers with our stockholders, reward and motivate both short-term and long-term executive performance and provide an incentive for retention. Our decisions regarding the amount and type of equity incentive compensation, the allocation of equity and relative weighting of these awards within total executive compensation have been based on market practices of similarly-situated companies.

We grant equity incentive awards to our employees, including our named executive officers, in connection with the commencement of their employment and, generally, on an annual basis, as part of our overall compensation program. Historically, all grants of awards to our named executive officers have been made by our board of directors at regularly scheduled meetings during the year upon the recommendation of our compensation committee. The exercise or purchase price of each award is equal to the fair market value of the award on the date of grant, which is the date of the board meeting approving such grant or such other date as the board may specify at its discretion. The following factors are considered in determining the amount of equity incentive awards, if any, to be granted to our named executive officers:

- the number of shares subject to, and exercise prices (when applicable) of, outstanding awards, both exercisable, or vested, and unexercisable, or unvested, held by our executives;
- the vesting schedule of the unvested awards held by our executives; and
- the amount and percentage of total equity on a diluted basis held by our executives.

All historical stock option grants prior to our initial public offering were made at exercise prices that our board of directors determined to equal or exceed the fair market value of our shares of common stock on the respective grant dates.

Vesting of options and restricted stock granted to our named executive officers fully accelerates if such officer is terminated without "cause" within 18 months following a change in control of us – see "Severance and Change in Control Benefits" below. Vesting and exercise rights, if applicable, cease shortly after termination of employment except in the case of death or disability. 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 voting rights or the right to receive dividends or dividend equivalent payments.

28

Our insider trading policy, which applies to all of our employees and directors, prohibits (i) pledging of our securities, including purchasing our securities on margin, margin accounts and pledges as collateral for a loan and (ii) hedging of our securities, including shorts sales of our securities and purchases or sales of puts, calls and other derivative securities. We do not have any equity ownership guidelines for our executive officers.

2017 Equity Compensation Awards

Time-Based Option Grants

In February 2017, as part of the annual individual performance evaluations of our named executive officers, our board of directors, upon the recommendation of our compensation committee, granted to Mr. Bailey, Mr. Ehrlich and Dr. Needle options to purchase shares of our common stock as set forth in the table below. These stock option awards were granted with a term of 10 years and an exercise price of \$0.60 per share, which was the closing price of our common stock on the date of grant. The options vest in equal monthly installments over four years, subject to the officer's continued employment with our company. Our compensation committee made its recommendation based on its analysis, with input from our consultant, Radford, of the executive officer equity compensation practices in the 2016 Radford Global Life Sciences Survey and recommended awards that approximated the 50th percentile of executive equity incentive compensation at those companies. As Mr. Dallas and Dr. Mehta had not joined the company as of February 2017, they did not receive equity awards at that time. Mr. Dallas and Dr. Mehta instead each received time-based stock option awards granted in connection with his commencement of employment. These initial hire awards have a term of 10 years, an exercise price equal to the closing price of our common stock on the respective dates of grant, and vest over four years, with 25% of the shares vesting upon the one-year anniversary of the specified vesting commencement date of such grant, and the remaining shares vesting in 36 equal monthly installments thereafter.

Total Number of Shares of Common Stock Underlying

Name	Time-Based Options Granted in 2017
Michael Bailey	565,000
Matthew Dallas ⁽¹⁾	500,000
Keith Ehrlich	170,000
Michael Needle	210,000
Nikhil Mehta ⁽²⁾	500,000

(1)Mr. Dallas joined the company as its chief financial officer, effective June 1, 2017. His initial option was granted on July 3, 2017 with an exercise price of \$2.22, equal to the closing price of our common stock on the date of grant.

(2)Dr. Mehta joined the company as its senior vice president of regulatory and quality assurance, effective November 20, 2017. His initial option was granted on November 20, 2017 with an exercise price of \$3.09, equal to the closing price of our common stock on the date of grant.

Performance-Based Option Grants

In February 2017, our board of directors, upon the recommendation of our compensation committee with input from Radford, also granted to Mr. Bailey, Mr. Ehrlich and Dr. Needle performance-based options to purchase shares of our common stock as set forth in the table below. These performance-based option awards were granted with a term of 10 years and an exercise price of \$0.60 per share, which was the closing price of our common stock on the date of grant. The performance-based options commence vesting upon our company's achievement of the following enumerated goals relating to the TIVO-3 and TiNivo studies in aRCC:

1. Enrollment Milestone – If, at the determination of the compensation committee in its sole discretion, we completed enrollment of the TIVO-3 phase 3 clinical trial on or before June 30, 2017, one-third of the total number of shares underlying each option vest as follows: (a) one-sixth of the total number of shares vest on February 8, 2018; and (b) one-sixth of the total number of shares vest on February 8, 2019. The compensation committee determined that enrollment for TIVO-3 was completed in June 2017, satisfying the performance condition and triggering the initiation of vesting of the related one-third of the option awards.

2.Data Milestone – If, at the determination of the compensation committee in its sole discretion, we received data from the phase 1 portion of the phase 1/2 TiNivo clinical trial sufficient to proceed to the phase 2 portion of the clinical trial on or before December 31, 2017, one-third of the total number of shares underlying each option vest as follows: (a) one-sixth of the total number of shares vest on February 8, 2018; and (b) one-sixth of the total number of shares vest on February 8, 2019. The compensation committee determined that data from phase 1 was received, and phase 2 initiated, prior to December 2017, satisfying the performance condition and triggering the initiation of vesting of the related one-third of the option awards.

3.Regulatory Milestone – If, at the determination of the compensation committee in its sole discretion, we have filed a NDA with the FDA for tivozanib (i) no more than sixth months after topline data of the TIVO-3 phase 3 clinical trial has become available and (ii) no later than February 7, 2019, one-third of the total number of shares underlying each option vest on February 8, 2019.

If the Regulatory Milestone is not met on or before February 7, 2019, then the one-third of the option grant tied to this milestone irrevocably expires as of such date. Vesting for any performance-based option described above is contingent upon the option grantee’s continued service to the Company as of the applicable vesting date. To the extent that any portion of a performance-based option vests as a result of achievement of the milestones and satisfaction of the service requirement, such portion shall expire on the earlier of (i) one day prior to the ten-year anniversary of the grant date and (ii) the three-month anniversary of the termination of the optionholder’s service with our company (one-year anniversary in the case of the death or disability of the optionholder).

Name	Total Number of Shares of Common Stock Underlying Performance-Based Options Granted in 2017
Michael Bailey ⁽¹⁾	283,000
Keith Ehrlich ⁽²⁾	85,000
Michael Needle ⁽³⁾	105,000

(1) On February 8, 2017, Mr. Bailey was granted an option to purchase 283,000 shares of common stock, subject to the achievement of three performance milestones relating to the company's clinical trials and regulatory filings. As described above, each of the three performance milestones represents one-third of the total number of shares subject to the option. On June 21, 2017, the compensation committee determined that the first two performance milestones were met. As a result, one-third of the option vested on February 8, 2018, and one-third of the option will vest on February 8, 2019, subject to Mr. Bailey’s continued service to the company.

(2) On February 8, 2017, Mr. Ehrlich was granted an option to purchase 85,000 shares of common stock. Mr. Ehrlich retired from the company, effective June 30, 2017, before the occurrence of either of the vesting dates to which his option was subject, and therefore the award was terminated.

(3) On February 8, 2017, Dr. Needle was granted an option to purchase 105,000 shares of common stock, subject to the achievement of three performance milestones relating to the company's clinical trials and regulatory filings. As described above, each of the three performance milestones represents one-third of the total number of shares subject to the option. On June 21, 2017, the compensation committee determined that the first two performance milestones were met. As a result, one-third of the option vested on February 8, 2018, and one-third of the option will vest on February 8, 2019, subject to Mr. Needle’s continued service to the company.

2017 Amendment of the June 2014 Performance-Based Option Grants

On June 19, 2014, the company granted performance-based options, or the 2014 performance options. The shares subject to the 2014 performance options were scheduled to vest approximately one-third on the achievement of each of the following performance targets related to the price of the company’s common stock: (i) a stock price of \$3.00 or greater for thirty consecutive trading days prior to December 31, 2016, (ii) a stock price of \$4.50 or greater for thirty

consecutive trading days prior to December 31, 2017, and (iii) a stock price of \$6.50 or greater for thirty consecutive trading days prior to December 31, 2018. The first target was not achieved by December 31, 2016, and, accordingly, approximately one-third of the stock options were cancelled. Of the original grants, five current employees have outstanding 2014 performance options, including four non-executive employees and Mr. Bailey, who has 167,500 outstanding 2014 performance options.

On August 15, 2017, the board approved an amendment to the 2014 performance options to convert the performance targets for the two remaining milestones, which were based on the price of the company's common stock, to targets based on an equivalent level of growth in the company's market capitalization. This amendment was adopted in order to better balance the goal of growth in the company's stock price with the goals of sound financial management and long-term success of the company. The exercise price of the 2014 performance options of \$1.57 per share was not amended in order to maintain alignment with shareholder interests.

As amended, approximately 49% and 51% of the remaining shares subject to the 2014 performance options would vest upon the company's achievement of a market capitalization of approximately three times and four times, respectively, the company's market capitalization at the June 2014 grant date for thirty consecutive trading days during the period from August 15, 2017 through December 31, 2017, provided that the grantee continued to be employed by the company on the date of the announcement of topline data in the company's TIVO-3 trial. We refer to these milestones as the second milestone and third milestone, respectively. In October 2017, the compensation committee determined that the second milestone and third milestone had been achieved in September 2017. Accordingly, all of the shares subject to the outstanding 2014 performance options are scheduled to vest on the date the company announces the topline data of its TIVO-3 trial.

2018 Equity Compensation Awards

Time-Based Option Grants

In February 2018, as part of the annual individual performance evaluations of our named executive officers, our board of directors, upon the recommendation of our compensation committee, granted to our named executive officers options to purchase shares of our common stock as set forth in the table below. The stock option awards to such named executive officers were granted with a term of 10 years and an exercise price of \$3.08 per share, which was the closing price of our common stock on the date of grant. The options vest in equal monthly installments over four years, subject to the officer's continued employment with our company. Our compensation committee made its recommendation based on its analysis, with input from our consultant, Radford, of the executive officer equity compensation practices of the 2018 peer group companies and the 2017 Radford Global Life Sciences Survey and recommended awards that approximated the 50th percentile of executive equity incentive compensation at those companies.

Name	Total Number of Shares of Common Stock Underlying Time-Based Options Granted in 2018
Michael Bailey	1,000,000
Matthew Dallas ⁽¹⁾	250,000
Michael Needle	225,000
Nikhil Mehta ⁽¹⁾	75,000

(1) For Mr. Dallas and Dr. Mehta, who each joined the company during 2017, a portion of the total number of options granted in February 2018 were granted in the form of time-based options, as set forth above, and a portion were granted in the form of performance-based options, as set forth below.

Performance-Based Option Grants

As discussed above, two of the three performance milestones associated with the performance options granted in 2017 were met prior to the dates that Mr. Dallas and Dr. Mehta joined our company. In February 2018, in order to incentivize Mr. Dallas and Dr. Mehta to the achievement of the third milestone, related to the filing of a new drug

application with the FDA for tivozanib, our board of directors, upon the recommendation of our compensation committee, granted to Mr. Dallas and Dr. Mehta performance-based options to purchase shares of our common stock tied to the achievement of the regulatory milestone set forth in the table below. While the milestone itself is identical to the regulatory milestone contained in the performance options granted to our other named executive officers in 2017, the vesting schedule is extended to account for the later grant date of these options. The performance options granted to Mr. Dallas and Dr. Mehta in 2018 were granted with a term of 10 years and an exercise price of \$3.08 per

31

share, which was the closing price of our common stock on the date of grant. These performance-based options commence vesting upon our company’s achievement of the following milestone:

Regulatory Milestone – if, at the determination of the Compensation Committee in its sole discretion, we have filed a NDA with the FDA for tivozanib (i) no more than sixth months after topline data of the TIVO-3 phase 3 clinical trial has become available and (ii) no later than February 7, 2019, one-half of the total number of shares underlying the performance option shall vest on February 8, 2019 and the second half will vest on February 8, 2020.

If this milestone is not met on or before February 7, 2019, then the 2018 performance options irrevocably expire as of such date. Vesting for the 2018 performance-based options is contingent upon the option grantee’s continued service to our company as of the vesting date. To the extent that these performance-based options vest as a result of achievement of the milestone and/ or satisfaction of the service requirement, such options shall expire one day prior to the ten-year anniversary of the grant date or earlier on the three-month anniversary of the termination of the optionholder’s service with our company (one-year anniversary in the case of the death or disability of the optionholder), whichever is earlier.

Name	Total Number of Shares of Common Stock Underlying Performance-Based Options Granted in 2018
Matthew Dallas	100,000
Nikhil Mehta	175,000

Other Benefits

We believe that establishing competitive benefit packages for our employees is an important factor in attracting and retaining highly qualified personnel. Named executive officers are eligible to participate in all of our employee benefit plans, such as medical, dental, group life and accidental death and dismemberment insurance and our 401(k) plan, in each case on the same basis as other employees. Under our 401(k) plan, we match 50% on every dollar contributed by an employee up to a maximum of 5% of the employee’s salary. The match vests at 25% per year over four years. Consistent with our compensation philosophy, we intend to maintain our current benefits for our named executive officers. Our compensation committee may, in its discretion, revise, amend or add to the benefits and perquisites made available to our named executive officers if it deems it advisable to do so.

Severance and Change in Control Benefits

Our named executive officers who continue to provide service to the company are entitled to receive severance benefits in connection with a termination of their employment not in connection with a change in control. Additionally, pursuant to our Key Employee Change in Control Severance Benefit Plan, certain of our key employees, including our named executive officers who continue to provide service to the company, are entitled to severance payments if we terminate their employment without cause or if they leave their employment with us for good reason (as such terms are defined in the Key Employee Change in Control Severance Benefit Plan) within 18 months of a change in control of us. Further, if we terminate a named executive officer’s employment without cause or such named executive officer leaves his employment with us for good reason within 18 months of a change in control of us, all options held by such named executive officer will become immediately exercisable in full and all restricted stock held by such named executive officer will vest in full. Separately, in connection with the transition, retirement and release of claims agreement by and between Mr. Ehrlich and the company, dated May 3, 2017, Mr. Ehrlich received a lump sum severance payment of \$81,118, continued payment of COBRA premiums under our group health insurance policy, and an extended exercise period for the time-based stock awards previously granted to Mr. Ehrlich. Please refer to “Employment Agreements and Severance Arrangements” for a more detailed discussion of these benefits. We have also provided more information about these benefits, along with estimates of their value under various

circumstances, under “—Potential Payments and Benefits Upon Termination and a Change in Control” below.

32

We believe providing these benefits helps us compete for executive talent. After reviewing the practices of comparable companies, we believe that our severance and change in control benefits are generally in line with severance packages offered to executives by such companies.

Our practice in the case of change in control benefits has been to structure these as “double trigger” benefits. This means that the change in control does not itself trigger benefits; rather, benefits are paid only if the employment of the executive is terminated during a specified period after the change in control. We believe a “double trigger” benefit maximizes stockholder value because it prevents an unintended windfall to executives in the event of a friendly change in control, while still providing executives with appropriate incentives to cooperate in negotiating any change in control in which they believe they may lose their jobs but which may be beneficial to stockholders.

Tax and Accounting Considerations

Section 162(m) of the Internal Revenue Code of 1986, as amended, or the Code, generally disallows a tax deduction for compensation in excess of \$1.0 million paid to our chief executive officer and our three other officers (other than our chief financial officer) whose compensation is required to be reported to our stockholders pursuant to the Exchange Act by reason of being among the three other most highly paid executive officers. Qualifying performance-based compensation is not subject to the deduction limitation if specified requirements are met. We have a history of operating losses and expect to continue to incur operating losses for the foreseeable future. These net operating loss carryforwards would have the effect of offsetting certain future taxable gains, and as such, we generally do not consider the tax implications of our executive compensation programs to be meaningful to our operating or financial results. Accordingly, the 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.

We account for equity compensation paid to our employees in accordance with Accounting Standards Codification, or ASC, 718, which requires us to measure and recognize compensation expense in our financial statements for all share-based payments based upon an estimate of their fair value over the service period of the award. We record cash compensation as an expense at the time the obligation is incurred.

Summary Compensation Table for the Years Ended December 31, 2017, 2016 and 2015

The following table sets forth information for the years ended December 31, 2017, 2016 and 2015 regarding compensation awarded to, earned by or paid to our named executive officers.

Name and Principal Position	Year	Salary (\$)	Bonus (\$) ⁽¹⁾	Option Awards (\$) ⁽²⁾	Non-Equity		Total (\$)
					Incentive Plan Compensation (\$) ⁽³⁾	All Other Compensation (\$) ⁽⁴⁾	
Michael Bailey, Chief Executive Officer	2017	\$479,655	\$—	\$451,076 ⁽⁵⁾	\$369,334	\$68,593	\$1,368,658
	2016	\$444,125	—	\$329,774	\$188,753	\$68,433	\$1,031,085
	2015	\$425,000	\$85,000	\$521,500	\$180,625	\$68,730	\$1,280,855
Matthew Dallas, Chief Financial Officer ⁽⁶⁾	2017	\$155,017	\$—	\$773,750	\$103,564	\$413	\$1,032,331
Keith Ehrlich, Former Chief Financial Officer ⁽⁸⁾	2017	\$188,251	\$—	\$135,371 ⁽⁷⁾	\$—	\$82,099	\$405,720
	2016	\$313,500	\$25,000	\$107,177	\$109,850	\$3,145	\$558,672
	2015	\$208,381	\$50,000	\$422,632	\$102,000	\$3,086	\$786,099
Michael Needle, Chief Medical Officer	2017	\$421,814	\$—	\$123,827	\$222,718	\$45,112	\$813,470
	2016	\$407,550	—	\$131,910	\$141,827	\$70,112	\$751,399
	2015	\$381,602	—	\$369,100	\$132,600	\$40,112	\$923,414
Nikhil Mehta, Sr. Vice President, Regulatory and Quality Assurance ⁽⁹⁾	2017	\$36,873	\$—	\$1,088,500	\$25,518	\$803	\$1,151,694

(1) For Mr. Bailey, amounts represent cash retention awards paid during the year. For Mr. Ehrlich, the amounts represent his cash bonuses earned in 2015 and 2016 and paid in 2016 pursuant to his offer letter.

(2) The amounts reported in the “Option awards” column represents the grant date fair value of the stock options granted to such officers during 2015, 2016 and 2017 and, as applicable, incremental fair value as computed in accordance with FASB ASC Topic 718, using a Black-Scholes valuation model. A key assumption in the Black-Scholes valuation model is the exercise price, which represents the closing stock price of our common stock on the date of grant. The closing stock prices of our common stock on February 8, 2017, July 3, 2017 and November 20, 2017, were \$0.60, \$2.22 and \$3.09 per share, respectively. See note 8 of “Notes to Consolidated Financial Statements” in

our Annual Report on Form 10-K filed with the SEC on March 13, 2018 for a discussion of assumptions made by the Company in determining the grant date fair value of our option awards. Note that the amounts reported in this column reflect the accounting cost for these stock options and do not correspond to the actual economic value that may be received by the named executive officers from the stock options.

- (3) Our compensation committee determined to pay Mr. Bailey, Mr. Dallas, Dr. Needle and Dr. Mehta annual cash incentive plan awards equal to 140%, 138%, 132% and 132% of such executive officer's target award, respectively, for performance in 2017. Our compensation committee determined to pay Mr. Bailey, Mr. Ehrlich and Dr. Needle annual cash incentive plan awards equal to 85%, 88% and 87% of such executive officer's target award, respectively, for performance in 2016. Our compensation committee determined to pay Mr. Bailey, Mr. Ehrlich and Dr. Needle annual cash incentive plan awards equal to 85% of such executive officer's target award, respectively, for performance in 2015.
- (4) Amounts in this column represent the sum of (i) any matching contributions made by us under our tax-qualified 401(k) Retirement Plan, (ii) any life insurance premiums paid on behalf of the executive officer, (iii) housing allowances for Mr. Bailey, in the amount of \$60,000 in each of 2015, 2016 and 2017 and for Dr. Needle, in the amounts of \$30,000 in 2015, \$60,000 in 2016 and \$35,000 in 2017, and (iv) severance for Mr. Ehrlich, in the amount of \$81,118, in connection with the transition, retirement and release of claims agreement by and between Mr. Ehrlich and the company, dated May 3, 2017.
- (5) Amount includes the \$117,727 incremental fair value associated with the August 2017 amendment of the June 2014 performance-based options, as described in "—2017 Amendment of the June 2014 Performance-Based Option Grants" above.
- (6) Mr. Dallas was appointed chief financial officer, effective June 1, 2017, and received a pro-rated amount of his annual salary and his annual cash incentive plan award for his service during 2017.

(7) Amount includes the \$35,130 incremental fair value associated with an extension of the exercise period related to certain option grants, as described in “—Transition, Retirement and Release of Claims Agreement with Keith Ehrlich” above.

(8) Mr. Ehrlich retired from the company, effective June 30, 2017, and received a pro-rated amount of his annual salary and no annual cash incentive plan award for his service during 2017.

(9) Dr. Mehta was appointed senior vice president of regulatory and quality assurance, effective November 20, 2017, and received a pro-rated amount of his annual salary and his annual cash incentive plan award for his service during 2017.

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

The following table sets forth information for the year ended December 31, 2017 regarding grants of plan-based awards made during 2017 to our named executive officers.

Name	Grant Date	Estimated Future Payouts Under Non-Equity Incentive Plan Awards Target (\$) ⁽¹⁾	Estimated Future Payouts Under Equity Incentive Awards		All Other Option Awards: Number of Securities Underlying Options (#) ⁽²⁾	Exercise or Base Price of Stock and Option Awards (\$/sh)	Grant Date Fair Value of Stock and Option Awards (\$) ⁽³⁾
			Threshold (#)	Target (#)			
Michael Bailey		\$263,810					
	2/8/2017				565,000	\$0.60	\$222,102
	2/8/2017			283,000 ⁽⁴⁾⁽⁵⁾		\$0.60	\$111,247
	8/15/2017			167,500		\$1.57	\$117,727 ⁽⁸⁾
Matthew Dallas		\$75,047					
	7/3/2017				500,000 ⁽⁶⁾	\$2.22	\$773,750
Keith Ehrlich		\$—					
	2/8/2017				170,000	\$0.60	\$66,827
	2/8/2017			85,000 ⁽⁴⁾		\$0.60	\$33,414
	5/3/2017 ⁽⁹⁾				298,779	\$0.60-1.57	\$35,130
Michael Needle		\$168,726					
	2/8/2017				210,000	\$0.60	\$82,551
	2/8/2017			105,000 ⁽⁴⁾⁽⁷⁾		\$0.60	\$41,276
Nikhil Mehta		\$19,331					
	11/20/2017				500,000 ⁽⁶⁾	\$3.09	\$1,088,500

(1) Represents the target payout levels under the annual cash incentive program. Target payouts for Mr. Bailey, Mr. Dallas, Dr. Needle and Dr. Mehta represented 55%, 40%, 40%, and 40% of base salary in 2017, respectively. Mr. Dallas and Dr. Mehta joined the company on June 1, 2017 and November 20, 2017, respectively, and, accordingly, their target payout levels in 2017 were prorated based upon their respective start dates. Mr. Ehrlich was not eligible

to participate in the 2017 annual cash incentive program as he retired on June 30, 2017. The actual payout with respect to each named executive officer is shown above in the Summary Compensation Table for the Years Ended December 31, 2017, 2016, and 2015 in the column titled “Non-Equity Incentive Plan Compensation.” The annual cash incentive program did not have threshold payout levels, as the determination of the level of achievement of corporate and individual goals was subjective and subject to the discretion of our board of directors. Payouts under the annual cash incentive program were not subject to any maximum limit. Additional information regarding the design of the annual cash incentive program, including a description of the corporate goals and individual performance applicable to 2017 awards, is described above in “—Executive Compensation Components.”

(2) For the vesting schedules of these awards, please see the footnotes to “Outstanding Equity Awards at December 31, 2017” table below. Some of these awards are subject to acceleration upon termination of employment as

35

further described in the “Employment Agreements and Severance Arrangements” and “—Potential Payments and Benefits Upon Termination and a Change in Control” sections below.

- (3) Amounts represent the grant date fair value, computed in accordance with FASB ASC Topic 718, using a Black-Scholes valuation model. A key assumption in the Black-Scholes valuation model is the exercise price, which represents the closing stock price of our common stock on the date of grant. The closing stock prices of our common stock on February 8, 2017, July 3, 2017 and November 20, 2017, were \$0.60, \$2.22 and \$3.09 per share, respectively. The assumptions used by us with respect to the valuation of option awards are set forth in Note 8 to our audited financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2017.
- (4) On February 8, 2017, Mr. Bailey, Mr. Ehrlich and Dr. Needle were granted options to purchase 283,000 shares, 85,000 shares, and 105,000 shares, respectively, of common stock, subject to the achievement of three performance milestones relating to the company's clinical trials and regulatory filings. Each of the three performance milestones represents one-third of the total number of shares subject to the option. On June 21, 2017, the compensation committee determined that the first two performance milestones were met, and thus each of Mr. Bailey, Mr. Ehrlich and Dr. Needle acquired the option to purchase two thirds of his total grant on that date. One-third of the shares underlying the acquired options vested on February 8, 2018, and one-third of the option will vest on February 8, 2019, subject to each recipient's continued service to the company. Mr. Ehrlich's option was terminated upon his retirement from the company as he would not be providing service to the company at the time of vesting.
- (5) Pursuant to the achievement of two of three performance milestones, as determined by the compensation committee, Mr. Bailey acquired the option to purchase 188,666 shares of common stock on June 21, 2017. The remaining 94,334 shares available under the grant are subject to the achievement of the third performance milestone. These milestones are described above in the “Performance-Based Option Grants” section above.
- (6) Represents initial option grants to Mr. Dallas and Dr. Mehta in connection with them joining the company on June 1, 2017 and November 20, 2017, respectively.
- (7) Pursuant to the achievement of two of three performance milestones, as determined by the compensation committee, Dr. Needle acquired the option to purchase 70,000 shares of common stock on June 21, 2017. The remaining 35,000 shares available under the grant are subject to the achievement of the third performance milestone. These milestones are described above in the “Performance-Based Option Grants” section above.
- (8) Represents incremental fair value associated with the August 2017 amendment of the June 2014 performance-based options, as described in “—2017 Amendment of the June 2014 Performance-Based Option Grants” above.
- (9) Mr. Ehrlich retired from the company, effective as of June 30, 2017. We recognized \$35,130 related to incremental fair value associated with an extension of the exercise period for Mr. Ehrlich's vested options, as described in “—Transition, Retirement and Release of Claims Agreement with Keith Ehrlich” below. For the exercise prices and number of securities underlying the vested portion of each option grant for which the exercise period was extended, please see the “Outstanding Equity Awards at December 31, 2017” table below.

Outstanding Equity Awards at December 31, 2017

The following table sets forth information regarding outstanding equity awards held as of December 31, 2017 by our named executive officers.

Option Awards⁽¹⁾

Name	Number of Securities Underlying Unexercised Options Exercisable (#)	Number of Securities Underlying Unexercised Options Unexercisable (#)	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options	Option Exercise Price (\$)	Option Expiration Date
Michael Bailey	—	188,666	94,334	\$0.60 ⁽²⁾	2/7/2027
	117,708	447,292		\$0.60 ⁽³⁾	2/7/2027
	220,416	239,584		\$1.08 ⁽⁴⁾	1/7/2026
	656,250	243,750		\$0.84 ⁽⁵⁾	1/6/2025
	—	167,500		\$1.57 ⁽⁶⁾	6/19/2024
	75,000	—		\$1.77	1/29/2024
	120,000	—		\$2.51	6/26/2023
	32,500	—		\$7.72	1/24/2023
	31,000	—		\$13.18	1/31/2022
	5,000	—		\$14.16	2/15/2021
	180,000	—		\$14.26	10/5/2020
Matthew Dallas	—	500,000		\$2.22 ⁽⁷⁾	7/3/2027
Keith Ehrlich ⁽⁸⁾	14,166	—		\$0.60	12/31/2018
	52,947	—		\$1.08	12/31/2018
	216,666	—		\$1.57	12/31/2018
	15,000	—		\$1.15	12/31/2018
Michael Needle	—	70,000	35,000	\$0.60 ⁽²⁾	2/7/2027
	43,750	166,250		\$0.60 ⁽³⁾	2/7/2027
	88,166	95,834		\$1.08 ⁽⁴⁾⁽⁹⁾	1/7/2026
	364,583	135,417		\$1.07 ⁽¹⁰⁾⁽¹¹⁾	2/3/2025
Nikhil Mehta	—	500,000		\$3.09 ⁽¹²⁾	11/20/2027

(1) The equity awards held by our named executive officers are subject to vesting acceleration upon certain events of termination of employment, as further described in the “—Employment Agreements and Severance Arrangements” and “—Potential Payments and Benefits Upon Termination and a Change in Control” sections below.

(2)

These options are subject to the achievement of three performance milestones relating to the company's clinical trials and regulatory filings. Each of the three performance milestones represents one-third of the total number of shares subject to the option. On June 21, 2017, the compensation committee determined that the first two performance milestones were met, and as a result, one-third of the shares subject to the option grant vested on February 8, 2018 and the other one-third of the shares subject to the option grant is scheduled to vest on February 8, 2019, contingent upon each recipient's continued service to the company. The remaining one-third of the shares subject to the option grant is contingent upon the achievement of the third performance milestone. These milestones are described above in the "Performance-Based Option Grants" section above.

- (3) These options vest in equal monthly installments through February 8, 2021.
- (4) These options vest in equal monthly installments through January 1, 2020.
- (5) These options vest in equal monthly installments through January 1, 2019.
- (6) These options will vest on the date the company announces the topline data of its TIVO-3 trial, as described in "—2017 Amendment of the June 2014 Performance-Based Option Grants" above.

37

- (7) This option vests as to 25% of the shares underlying the award on June 1, 2018, and in thirty-six equal monthly installments thereafter as to the remaining shares underlying the award through June 1, 2021.
- (8) Mr. Ehrlich retired from the company, effective as of June 30, 2017. We agreed to extend the exercise period for the vested portion of each unexercised time-based stock option award held by Mr. Ehrlich as of June 30, 2017 to December 31, 2018, as described in “—Transition, Retirement and Release of Claims Agreement with Keith Ehrlich” below.
- (9) On August 17, 2017, Dr. Needle entered into a marital settlement agreement with his wife, pursuant to which he is deemed to hold 67,889 of these options for the benefit of his wife, who is entitled to the shares issued upon exercise of such options by Dr. Needle. Dr. Needle's wife may be deemed an indirect beneficial owner of these options.
- (10) These options vest as to 25% of the shares underlying the award on January 9, 2016 and in thirty-six equal monthly installments thereafter as to the remaining shares underlying the award through January 9, 2019.
- (11) On August 17, 2017, Dr. Needle entered into a marital settlement agreement with his wife, pursuant to which he is deemed to hold 205,729 of these options for the benefit of his wife, who is entitled to the shares issued upon exercise of such options by Dr. Needle. Dr. Needle's wife may be deemed an indirect beneficial owner of these options.
- (12) This option vests as to 25% of the shares underlying the award on November 20, 2018, and in thirty-six equal monthly installments thereafter as to the remaining shares underlying the award through November 20, 2021.

Option Exercises

Our named executive officers did not exercise any stock options during the year ended December 31, 2017.

Pay Ratio of Chief Executive Officer to Median Employee

Following is a reasonable estimate, prepared under applicable SEC rules, of the ratio of the annual total compensation of our CEO to the median of the annual total compensation of our other employees.

We determined our median employee based on 2017 compensation, which consists of (i) annual base salary, (ii) target annual cash incentive bonus, and (iii) grant date fair value of equity awards granted during 2017 for each of our 18 employees (excluding the CEO) as of December 31, 2017. Base annual salaries and target annual cash incentive bonuses have been annualized for full-time employees who joined the company during 2017.

As disclosed in the Summary Compensation Table appearing above, our CEO's annual total compensation for 2017 was \$1,368,658. The annual total compensation of our median employee (other than the CEO) for 2017 was \$192,734. Based on the foregoing, our estimate of the ratio of the annual total compensation of our CEO to the median of the annual total compensation of all other employees was approximately 7 to 1. The annual total compensation for 2017 for our CEO and median employee were calculated using the same methodology required by the SEC for reporting named executive officer compensation in the Summary Compensation Table.

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

Employment Agreements and Severance Arrangements

Offer Letters with Executive Officers

Michael Bailey. In January 2015, in connection with his promotion to president and chief executive officer, we entered into a letter agreement with Mr. Bailey. The agreement provided for an initial annual base salary of \$425,000, which is subject to an annual adjustment at the discretion of the board, and also provides that Mr. Bailey is eligible for an annual bonus of up to 50% of his base salary, based on the achievement of performance goals as

38

determined at the discretion of the board. Pursuant to the agreement, the board approved a grant to Mr. Bailey of an option to purchase 900,000 shares of common stock at an exercise price of \$0.84 per share, which was the closing price of our common stock on the date of grant. The option becomes exercisable in equal monthly installments of 2.0833% of the shares underlying the option over a period of four years from the date of grant, subject to Mr. Bailey's continued service. Mr. Bailey is eligible to participate in our annual renewal equity program and other employee benefit plans, subject to the terms of those plans. Pursuant to the agreement, we also agreed to pay to Mr. Bailey \$5,000 per month to cover commuting and housing expenses.

Michael Needle. In January 2015, in connection with his appointment to the position of chief medical officer, we entered into an offer letter with Dr. Needle. The offer letter provided for an initial annual base salary of \$390,000, which is subject to an annual adjustment at the discretion of the board, and also provides that Dr. Needle is eligible for an annual bonus of up to 40% of his base salary, based on the achievement of performance goals as determined at the discretion of the board. Pursuant to the offer letter, the board approved a grant to Dr. Needle of an option to purchase 500,000 shares of common stock at an exercise price of \$1.07 per share, which was the closing price of our common stock on the date of grant. The option became exercisable as to 25% of the shares underlying the option on the first anniversary of Dr. Needle's date of hire and is exercisable as to the remaining shares underlying the option in 36 equal monthly installments thereafter, subject to Dr. Needle's continued service. Dr. Needle is eligible to participate in our annual renewal equity program and other employee benefit plans, subject to the terms of those plans. We also agreed to provide Dr. Needle with a housing/relocation allowance of \$5,000 per month through June 2017, up to an aggregate of \$120,000.

Keith Ehrlich. In April 2015, in connection with his appointment to the position of chief financial officer, we entered into an offer letter with Mr. Ehrlich. The offer letter provided for an initial annual base salary of \$300,000, which was subject to an annual adjustment at the discretion of the board, and also provided that Mr. Ehrlich was eligible for an annual bonus of up to 40% of his base salary, based on the achievement of performance goals as determined at the discretion of the board. Pursuant to the offer letter, Mr. Ehrlich also received a one-time bonus of \$75,000, which was paid in two installments of \$50,000 on January 15, 2016 and \$25,000 on April 15, 2016, each such payment having been contingent upon Mr. Ehrlich's continued employment with the company as of December 31, 2015 and March 31, 2016, respectively. In connection with the offer letter, the board approved a grant to Mr. Ehrlich of an option to purchase 400,000 shares of common stock at an exercise price of \$1.57 per share, which was the closing price of our common stock on the date of grant. The option became exercisable as to 25% of the shares underlying the option on the first anniversary of Mr. Ehrlich's date of hire and was exercisable as to the remaining shares underlying the option in 36 equal monthly installments thereafter, subject to Mr. Ehrlich's continued service. Mr. Ehrlich was eligible to participate in our annual renewal equity program and other employee benefit plans, subject to the terms of those plans. In connection with Mr. Ehrlich's retirement from the position of chief financial officer of the company, no additional shares underlying his options have vested since June 30, 2017 or will vest in the future.

Matthew Dallas. In May 2017, in connection with his appointment to the position of chief financial officer, we entered into an offer letter with Mr. Dallas. The offer letter provided for an initial annual base salary of \$320,000, which is subject to an annual adjustment at the discretion of the board, and also provides that Mr. Dallas is eligible for an annual bonus of up to 40% of his base salary, based on the achievement of performance goals as determined at the discretion of the board. Pursuant to the offer letter, the board approved a grant to Mr. Dallas of an option to purchase 500,000 shares of common stock at an exercise price of \$2.22 per share, which was the closing price of our common stock on the date of grant. The option vests as to 25% of the shares underlying the option on the first anniversary of the Mr. Dallas's date of hire and vests as to the remaining shares underlying the option in 36 equal monthly installments thereafter, subject to Mr. Dallas's continued service. Mr. Dallas is eligible to participate in our annual renewal equity program and other employee benefit plans, subject to the terms of those plans.

Nikhil Mehta. In November 2017, in connection with his appointment to the position of Senior Vice President of Regulatory and Quality Assurance, we entered into an offer letter with Dr. Mehta. The offer letter provided for an initial base salary of \$419,999, which is subject to an annual adjustment at the discretion of the board, and also provides that Dr. Mehta is eligible for an annual bonus of up to 40% of his base salary, based on the achievement of performance goals as determined at the discretion of the board. Pursuant to the offer letter, the board approved a grant to Dr. Mehta of an option to purchase 500,000 shares of common stock at an exercise price of \$3.09 per share, which was the closing price of our common stock on the date of grant. The option vests as to 25% of the shares

underlying the option on the first anniversary of Dr. Mehta's date of hire and vests as to the remaining shares underlying the option in 36 equal monthly installments thereafter, subject to Dr. Mehta's continued service. Dr. Mehta is eligible to participate in our annual renewal equity program and other employee benefit plans, subject to the terms of those plans.

Severance and Change in Control Agreements with Executive Officers

We have entered into individual severance and change in control agreements with Mr. Bailey, Dr. Needle, Mr. Dallas and Dr. Mehta. All benefits payable pursuant to such agreements are to be paid or furnished to the named executive officer by us and are contingent upon the named executive officer executing a release of claims in our favor in a form satisfactory to us. In addition, Mr. Bailey, Dr. Needle, Mr. Dallas and Dr. Mehta are subject to non-competition and non-solicitation covenants as part of their individual severance and change in control agreements, subject to certain exceptions. If an executive's employment is terminated within 18 months following a change in control of the Company, the individual severance and change in control agreements provide that all severance payments be made pursuant to our Key Employee Change in Control Severance Benefits Plan.

Michael Bailey. In September 2010, we entered into a severance and change in control agreement with Mr. Bailey, which was amended by a retention bonus award and severance agreement letter dated February 3, 2014, which we refer to collectively as the Bailey severance agreement. The Bailey severance agreement provides that if Mr. Bailey's employment is terminated "without cause," due to a "disability" or "for good reason," as such terms are defined therein, he will be entitled to (i) continue to receive his base salary in effect on the date of his termination until the earlier of (a) 12 months following the date of his termination and (b) the date on which he commences an employment or consulting relationship with substantially equivalent compensation; (ii) receive a lump sum payment of his annual cash incentive award target pro-rated through the date of his termination; and (iii) continue his health insurance for the lesser of 12 months or until such time as he becomes eligible for group health coverage through another employer.

Michael Needle. In January 2015, we entered into a severance and change in control agreement with Dr. Needle, which we refer to as the Needle severance agreement. The Needle severance agreement provides that if Dr. Needle's employment is terminated "without cause," due to a "disability" or "for good reason," as such terms are defined therein, he will be entitled to (i) continue to receive his base salary in effect on the date of his termination until the earlier of (a) 12 months following the date of termination and (b) the date on which he commences an employment or consulting relationship with substantially equivalent compensation; (ii) receive a lump sum payment of his annual cash incentive award target pro-rated through the date of his termination; and (iii) continue his health insurance for the lesser of 12 months or until such time as he becomes eligible for group health coverage through another employer.

Matthew Dallas. In November 2017, we entered into a severance and change in control agreement with Mr. Dallas, which we refer to as the Dallas severance agreement. The Dallas severance agreement provides that if Mr. Dallas's employment is terminated "without cause," due to a "disability" or "for good reason," as such terms are defined therein, he will be entitled to (i) continue to receive his base salary in effect on the date of his termination (a) if the termination occurs prior to June 30, 2018, then until the earlier of (x) 6 months following the date of termination or (y) the date on which he commences an employment or consulting relationship with substantially equivalent compensation; or (b) if the termination occurs on or after June 30, 2018, then until the earlier of (x) 12 months following the date of termination or (y) the date on which he commences an employment or consulting relationship with substantially equivalent compensation; and (ii) continue his health insurance for the lesser of 6 or 12 months, in accordance with the foregoing provisions, or until such time as he becomes eligible for group health coverage through another employer.

Nikhil Mehta. In November 2017, we entered into a severance and change in control agreement with Dr. Mehta, which we refer to as the Mehta severance agreement. The Mehta severance agreement provides that if Dr. Mehta's

employment is terminated “without cause,” due to a “disability” or “for good reason,” as such terms are defined therein, he will be entitled to (i) continue to receive his base salary in effect on the date of his termination (a) if the termination occurs prior to June 30, 2018, then until the earlier of (x) 6 months following the date of termination or (y) the date on which he commences an employment or consulting relationship with substantially equivalent compensation; or (b) if the termination occurs on or after June 30, 2018, then until the earlier of (x) 12 months

40

following the date of termination or (y) the date on which he commences an employment or consulting relationship with substantially equivalent compensation; and (ii) continue his health insurance for the lesser of 6 or 12 months, in accordance with the foregoing provisions, or until such time as he becomes eligible for group health coverage through another employer.

Key Employee Change in Control Severance Benefits Plan

In addition to the individual severance and change in control agreements described above, Mr. Bailey, Dr. Needle, Mr. Dallas and Dr. Mehta participate in our key employee change in control severance benefits plan. Mr. Ehrlich also participated in key employee change in control severance benefits plan until his retirement from the company, effective June 30, 2017, as further described below. No payments are made pursuant to individual severance and change in control agreements if payments are made under this plan. All benefits payable under the plan are to be paid or furnished to the participant by us and are contingent upon the participant executing a release of claims in our favor in a form satisfactory to us. Pursuant to the terms of the plan, if we terminate a named executive officer's employment without cause or if they leave their employment with us for good reason within 18 months following a change in control of us, such named executive officer is entitled to the following benefits:

- continued receipt of compensation after termination at a rate equal to such executive's then-current base salary (1.5 times base salary in the case of Mr. Bailey) for 12 months (18 months in the case of Mr. Bailey);
- payment of a sum equal to (i) such individual's pro rata target bonus plus (ii) an amount equal to one times his target bonus (1.5 times his target bonus, in the case of Mr. Bailey); and
- continued health insurance for 12 months (18 months in the case of Mr. Bailey).

Further, pursuant to the terms of the plan, if we terminate a named executive officer's employment without cause or such named executive officer leaves his employment with us for good reason within 18 months of a change in control of us, all options held by such named executive officer will become immediately exercisable in full and all restricted stock held by such named executive officer will become vested in full.

Transition, Retirement and Release of Claims Agreement with Keith Ehrlich

As previously announced, Mr. Ehrlich retired from the company, effective as of June 30, 2017, or the Retirement Date. On May 3, 2017, we entered into a transition, retirement and release of claims agreement, or the Retirement Agreement, with Mr. Ehrlich to provide for an orderly transition to his successor and to obtain certain assurances and cooperation from him post-employment. Under the Retirement Agreement, we agreed to pay Mr. Ehrlich a lump sum cash payment, in the amount of \$81,118, less all applicable taxes and withholdings, as severance pay (an amount equivalent to three (3) months of Mr. Ehrlich's base salary) upon the conclusion of his post-employment period on September 30, 2017 and COBRA premiums under our group health insurance policy through September 30, 2017. In addition, we agreed to extend the exercise period for the vested portion of each unexercised time-based stock option award held by Mr. Ehrlich on the Retirement Date to December 31, 2018 (notwithstanding any contrary terms set forth in the stock option agreements evidencing such awards). In connection with this extension in Mr. Ehrlich's exercise period, we recognized incremental fair value in the amount of \$35,130, as computed in accordance with FASB ASC Topic 718, using a Black-Scholes valuation model. Following the Retirement Date, Mr. Ehrlich agreed to be bound by confidentiality provisions and agreed to a release of all claims against our company.

Potential Payments and Benefits Upon Termination and a Change in Control

Our named executive officers (except Mr. Ehrlich) are entitled to certain benefits in the event their employment is terminated without cause, due to a disability or for good reason, as described above. The following table describes the potential payments and benefits to each of our named executive officers following a termination of employment without cause, due to a disability or for good reason, as the same were payable on December 31, 2017, except in the

case of Mr. Ehrlich. Actual amounts payable to each executive listed below upon termination can only be determined definitively at the time of each executive's actual departure. In addition to the amounts shown in the table below, each executive would receive payments for amounts of base salary and vacation time accrued through the date of termination and payment for any reimbursable business expenses incurred. For information relating to

41

compensation earned by each of our named executive officers, see our “Summary Compensation Table for the Years Ended December 31, 2017, 2016 and 2015” above.

Name and Principal Position	Benefit Type	Termination Without Cause, Due to a Disability or For Good Reason (\$)	Termination without Cause or For Good Reason Within 18 Months of a Change in Control (\$)
Michael Bailey	Base Salary	\$479,655 ⁽¹⁾	\$719,483 ⁽²⁾
	Cash Incentive Award	\$263,810 ⁽³⁾	\$659,526 ⁽⁴⁾
	Healthcare Benefits	\$30,072 ⁽⁵⁾	\$45,108 ⁽⁶⁾
	Market Value of Awards		
	Vesting on Termination ⁽⁷⁾	\$—	\$2,688,691
	Total	\$773,537	\$4,112,807
	Matthew Dallas	Base Salary	\$320,000 ⁽¹⁾⁽⁸⁾
Cash Incentive Award		\$—	\$256,000 ⁽⁴⁾
Healthcare Benefits		\$2,448 ⁽⁵⁾	\$2,448 ⁽⁶⁾
Market Value of Awards			
Vesting on Termination ⁽⁷⁾		\$—	\$285,000
Total		\$322,448	\$863,448
Keith Ehrlich ⁽⁹⁾		Base Salary	\$81,118
	Cash Incentive Award	\$—	\$—
	Healthcare Benefits	\$5,073	\$—
	Market Value of Awards		
	Vesting on Termination	\$35,130	\$—
	Total	\$121,321	\$—
	Michael Needle	Base Salary	\$421,814 ⁽¹⁾
		\$168,726 ⁽³⁾	\$337,451 ⁽⁴⁾

Cash Incentive Award		
Healthcare Benefits	\$33,000 ⁽⁵⁾	\$33,000 ⁽⁶⁾
Market Value of Awards		
Vesting on Termination ⁽⁷⁾	\$—	\$990,831
Total	\$623,539	\$1,783,096

Nikhil Mehta

Base Salary	\$419,999 ⁽¹⁾⁽⁸⁾	\$419,999 ⁽²⁾
Cash Incentive Award	\$—	\$335,999 ⁽⁴⁾
Healthcare Benefits	\$33,000 ⁽⁵⁾	\$33,000 ⁽⁶⁾
Market Value of Awards		
Vesting on Termination ⁽⁷⁾	\$—	\$—
Total	\$452,999	\$788,998

(1) Represents the named executive officer's base salary payable over 12 months. Severance is equal to payment of the executive's base salary until the earlier of (i) 12 months following the date of termination and (ii) the date on which the executive commences full-time employment or a full-time consulting relationship with substantially equivalent compensation.

- (2) Represents 1.5 times the named executive officer’s base salary payable over 18 months following the date of termination for Mr. Bailey and 1.0 times the named executive officer’s base salary payable over 12 months following the date of termination for the other named executive officers.
- (3) Represents the named executive officer’s severance bonus payable within 30 days of the date of termination. Severance bonus is equal to payment of the executive’s target annual incentive plan bonus pro-rated through the date of termination.
- (4) Represents the named executive officer’s severance bonus payable over 12 months (18 months for Mr. Bailey) following the date of termination. The amount of severance bonus is equal to 1.5 times the target annual incentive plan bonus for Mr. Bailey and 1.0 times the target annual incentive plan bonus for the other named executive officers. Severance bonus is in addition to the named executive officer’s target annual incentive plan bonus pro-rated through the date of termination.
- (5) Represents the cost of continued COBRA benefits for the named executive officer and any qualified beneficiary. COBRA benefits are payable until the earlier of (i) 12 months (or as long as such eligibility for the executive and each qualified beneficiary continues) from the date such benefits would otherwise end under the applicable plan terms and (ii) the date the executive becomes eligible for group health coverage through another employer. This value is based upon the type of insurance coverage we carried for each named executive officer as of December 31, 2017 and is valued at the premiums in effect on December 31, 2017.
- (6) Represents the cost of continued COBRA benefits for the named executive officer and any qualified beneficiary for 12 months (18 months for Mr. Bailey) following the date of termination.
- (7) Represents the value attributable to the acceleration of 100% of the then unvested options, determined by multiplying the number of shares accelerated by the difference between the exercise price of the option and the closing price of our common stock as of December 29, 2017, the last trading day of 2017. The then unvested options held by Dr. Mehta as of December 31, 2017 had an exercise price greater than the \$2.79 closing price of our common stock on December 29, 2017.
- (8) The named executive officer’s base salary would only be payable over 6 months if the termination occurs prior to June 30, 2018. Severance would be equal to payment of the executive’s base salary until the earlier of (i) 6 months following the date of termination and (ii) the date on which the executive commences full-time employment or a full-time consulting relationship with substantially equivalent compensation.
- (9) Mr. Ehrlich retired from the company, effective as of June 30, 2017, as described in “—Transition, Retirement and Release of Claims Agreement with Keith Ehrlich”. Amounts listed herein represent actual amounts paid to Mr. Ehrlich in connection with his retirement rather than a hypothetical amount as if he had retired December 31, 2017.

Equity Compensation Plan Information

The following table sets forth information concerning our equity compensation plans as of December 31, 2017.

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders	7,537,958	\$2.00	3,549,657
Equity compensation plans not approved by security holders	—	—	—
Total			

Compensation Committee Report

Our compensation committee has reviewed and discussed the “Compensation Discussion and Analysis” required by Item 402(b) of Regulation S-K with management. Based upon such review and discussions, our compensation committee recommended to our board that such section be included in this proxy statement.

By the compensation committee of the board of directors of AVEO Pharmaceuticals, Inc.,

Anthony Evnin, Chair

Kenneth Bate

John Johnson

Compensation Committee Interlocks and Insider Participation

During 2017, our compensation committee was comprised of Anthony Evnin, Kenneth Bate and Henri Termeer, until Mr. Termeer’s death in May 2017. Thereafter, our compensation committee was recomposed of Anthony Evnin, Kenneth Bate and Robert Young. In connection with his election to the board of directors in February 2018, John Johnson was appointed to our compensation committee, replacing Dr. Young and joining Mr. Bate and Dr. Evnin. No member of our compensation committee is or has been a current or former officer or employee of our company. 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 that had one or more executive officers serving as a director or member of our compensation committee during the year ended December 31, 2017. For a description of transactions between us and members of the compensation committee and entities affiliated with such members, please see “Certain Relationships and Related Person Transactions.”

Director Compensation

Mr. Bailey does not receive any compensation for his services as a director. The compensation that we pay to Mr. Bailey in his capacity as our president and chief executive officer is discussed under “—Compensation Discussion and Analysis” above.

The following table sets forth information regarding the compensation earned by our non-employee directors for the year ended December 31, 2017. Mr. Termeer served as a director until May 12, 2017.

Name	Fees Earned or Paid In Cash (\$)	Option Awards (\$) ⁽¹⁾⁽²⁾	All Other Compensation (\$)	Total (\$)
Kenneth Bate ⁽³⁾	\$32,500	\$35,215	\$—	\$67,715
Anthony Evnin ⁽³⁾	\$17,875	\$35,215	\$—	\$53,090
Henri Termeer ⁽⁴⁾	\$10,500	\$—	\$—	\$10,500
Robert Young ⁽³⁾	\$14,125	\$35,215	\$—	\$49,340
John Johnson ⁽³⁾⁽⁵⁾	\$—	\$—	\$—	\$—

(1) The assumptions we used in valuing options are described in Note 8, “Stock-Based Compensation,” to our audited financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2017. This column reflects the aggregate grant date fair value as calculated in accordance with ASC 718 for the indicated year in connection with options we granted in the indicated year, adjusted to disregard the effects of any estimate of

forfeitures related to service-based vesting.

- (2) Options were granted at fair market value on June 21, 2017 at an exercise price of \$0.70 per share. Each director was granted two options. The first option for 57,857 shares of common stock was payment for the annual \$40,500 board retainer fee in lieu of cash and vests in four quarterly installments over one year. The second option for 20,000 shares of common stock was in connection with each director's re-election at the annual stockholders meeting held on June 21, 2017 and vests over one year in twelve equal monthly installments. These options have a grant date fair market value of \$0.4523 per share.

44

(3) The following table reflects the aggregate number of option awards outstanding for our non-employee directors as of December 31, 2017.

Name	Option Awards
Kenneth Bate	269,533
Anthony Evnin	259,533
Robert Young	249,783
John Johnson	—

(4) Mr. Termeer passed away on May 12, 2017. His fees for service were prorated through this date.

(5) Mr. Johnson was appointed to the board of directors in February 2018, and therefore received no director compensation in 2017.

For the fiscal year ending December 31, 2017, our director compensation policy provided as follows:

Upon the initial election to our board of directors, each non-employee director will receive an option to purchase 40,000 shares of common stock exercisable for a price per share equal to the then fair market value of our common stock. These options expire ten years from the date of grant and vest in 36 equal monthly installments commencing with the first day of the month following the date of grant, subject to the director's continued service on our board.

Upon the date each director is re-elected at our annual stockholders meeting, such director will receive an option to purchase 20,000 shares of our common stock exercisable for a price per share equal to the then fair market value of our common stock. These options expire ten years from the date of grant and vest in twelve equal monthly installments commencing on the first day of the month following the date of grant, subject to the director's continued service on our board.

Our non-employee directors will be paid for their service on our board as follows:

- a base annual retainer fee of \$40,500 to be paid in the form of an option to purchase a number of shares calculated by dividing \$40,500 by the fair market value of the company's common stock on the date of the grant, and such option shall vest in four quarterly installments over the calendar year;

- an additional annual fee of \$20,000 for the chairperson or lead independent director;

- an additional annual fee for members of the audit committee (other than chairperson) of \$6,000, and \$15,000 for its chairperson;

- an additional annual fee for members of the compensation committee (other than chairperson) of \$5,000, and \$10,000 for its chairperson; and

- an additional annual fee for members of the nominating and governance committee (other than chairperson) of \$3,000, and \$5,000 for its chairperson.

In the event a director resigns from the board, the vesting of any options granted for service on the board ceases as of such date, and such director has a period of up to three months from the date of resignation to exercise any option granted as compensation for service on the board of directors, to the extent vested on the date of resignation.

In 2017, the compensation committee engaged Radford to review the Company's director compensation policy in order to ensure that our board compensation is competitive with and comparable to that of the companies in the 2016 Radford Global Life Sciences Survey. In accordance with Radford's recommendation, our board of directors determined to increase the amounts of the equity grants to new and re-elected directors. Effective February 1, 2018, our board of directors amended our director compensation policy to provide for these equity increases, as follows:

Upon the initial election to our board of directors, each non-employee director will receive an option to purchase 100,000 shares of common stock exercisable for a price per share equal to the then fair market value of our common stock. These options expire ten years from the date of grant and vest in 36 equal monthly installments commencing with the first day of the month following the date of grant, subject to the director's continued service on our board.

Upon the date each director is re-elected at our annual stockholders meeting, such director will receive an option to purchase 40,000 shares of our common stock exercisable for a price per share equal to the then fair market value of our common stock. These options expire ten years from the date of grant and vest in twelve

45

equal monthly installments commencing on the first day of the month following the date of grant, subject to the director's continued service on our board.

Our non-employee directors will be paid for their service on our board as follows:

- a base annual retainer fee of \$40,500;
 - an additional annual fee of \$20,000 for the chairperson or lead independent director;
 - an additional annual fee for members of the audit committee (other than chairperson) of \$6,000, and \$15,000 for its chairperson;
 - an additional annual fee for members of the compensation committee (other than chairperson) of \$5,000, and \$10,000 for its chairperson; and
 - an additional annual fee for members of the nominating and governance committee (other than chairperson) of \$3,000, and \$5,000 for its chairperson.
- In the event a director resigns from the board, the vesting of any options granted for service on the board ceases as of such date, and such director has a period of up to three months from the date of resignation to exercise any option granted as compensation for service on the board of directors, to the extent vested on the date of resignation.

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 Section 14A to the Exchange Act.

Our executive compensation programs are designed to attract, motivate, and retain our executive officers, who are critical to our success. Under these programs, our named executive officers are rewarded for the achievement of our short-term and longer-term financial and strategic goals and for driving corporate financial performance and stability. The programs contain elements of cash and equity-based compensation and are designed to align the interests of our executives with those of our stockholders.

The "Executive and Director Compensation" section of this proxy statement, including "Compensation Discussion and Analysis," describes in detail our executive compensation programs and the decisions made by our compensation committee and our board of directors with respect to the year ended December 31, 2017.

As discussed in these disclosures, we believe that our compensation program provides a competitive overall compensation that is designed to attract and retain top performers. To achieve this goal, our compensation program is structured to:

- provide total compensation and compensation elements that are competitive with those companies that are competing for available employees;
- hold our executive officers accountable for results over the long term and maintain integrity in all of the business dealings of our executive officers;
- align the interest of our executives with our stockholders;
- reward exceptional performance by individual employees;
- provide a mix of compensation that offers (i) a meaningful base compensation, with a potential to earn additional amounts based on achievement of defined corporate goals, which are generally expected to be achieved within 12 months, and (ii) the opportunity to share in the long-term growth of our company through equity compensation; and
- establish a clear connection between rewards and performance.

Our board believes this link between compensation and the achievement of our short-term and long-term business goals has helped to retain and motivate our employees to drive our performance over time. At the same time, we believe our program does not encourage excessive risk-taking by management.

Our board is asking stockholders to indicate their support for the compensation of our named executive officers as described in this proxy statement by casting a non-binding advisory vote "FOR" the following resolution:

RESOLVED, that the compensation paid to our 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. The outcome of this advisory vote will not overrule any decision by us or our board of directors (or any committee thereof), will not create or imply any change to our fiduciary duties or the fiduciary duties of our board of directors (or any committee thereof), and will not create or imply any additional fiduciary duties for us or our board (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 will consider the outcome of the vote when making future compensation decisions for named executive officers.

Our board of directors recommends that stockholders vote to approve

the compensation of our named executive officers by voting "FOR" Proposal No. 2.

47

PROPOSAL 3—RATIFICATION OF APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Our board has appointed the firm of Ernst & Young LLP, an independent registered public accounting firm, as independent auditors for the year ending December 31, 2018. Although stockholder approval of our board's appointment of Ernst & Young LLP is not required by law, our board believes that it is advisable to give stockholders an opportunity to ratify this appointment. If this proposal is not approved at the annual meeting, our board will reconsider its appointment of Ernst & Young LLP. Representatives of Ernst & Young LLP are expected to be present at the annual meeting and will have the opportunity to make a statement, if they desire to do so, and will be available to respond to appropriate questions from our stockholders.

Our board of directors recommends a vote "FOR" the ratification of the appointment of Ernst & Young LLP as our independent registered public accounting firm for the year ending December 31, 2018.

OTHER MATTERS

Our board of directors does not know of any other matters which may come before the meeting. However, if any other matters are properly brought before the meeting, it is the intention of the persons named in the accompanying proxy card to vote, or otherwise act, in accordance with their judgment on those matters.

STOCKHOLDER PROPOSALS

In order to be included in our proxy materials for the 2019 annual meeting of stockholders, stockholders' proposals must be submitted in accordance with the procedures outlined in Rule 14a-8 of the Exchange Act and received by us at our principal executive offices, One Broadway, 14th Floor, Cambridge, Massachusetts 02142 no later than December 28, 2018, the date that is 120 days prior to the first anniversary of the date of this proxy statement. However, if the date of the 2019 annual meeting of stockholders is changed by more than 30 days from the date of the previous year's meeting, then the deadline is a reasonable time before we begin to print and send our proxy statement for the 2019 annual meeting of stockholders. We suggest that proponents submit their proposals by certified mail, return receipt requested, addressed to our Secretary.

In addition, our bylaws require that we be given advance notice of stockholder nominations for election to our board of directors and of other matters which stockholders wish to present for action at an annual meeting of stockholders, other than matters included in our proxy statement. The required notice must be in writing and received by our corporate secretary at our principal offices not later than March 20, 2019 (90 days prior to the first anniversary of our 2018 annual meeting of stockholders) and not before February 18, 2019 (120 days prior to the first anniversary of our 2018 annual meeting of stockholders). However, if the 2019 annual meeting of stockholders is advanced by more than 20 days, or delayed by more than 60 days, from the first anniversary of the 2018 annual meeting of stockholders, notice must be received no earlier than the 120th day prior to such annual meeting and not later than the close of business on the later of (1) the 90th day prior to such annual meeting and (2) the 10th day following the date on which notice of the date of such annual meeting was mailed or public disclosure of the date of such annual meeting was made, whichever occurs first. Our bylaws also specify requirements relating to the content of the notice which stockholders must provide, including a stockholder nomination for election to our board of directors, to be properly presented at the 2019 annual meeting of stockholders.

OUR BOARD OF DIRECTORS ENCOURAGES STOCKHOLDERS TO ATTEND THE ANNUAL MEETING. WHETHER OR NOT YOU PLAN TO ATTEND IN PERSON, YOU ARE URGED TO VOTE BY PROXY OVER THE INTERNET, BY TELEPHONE OR BY MAIL AS DESCRIBED IN THE ENCLOSED PROXY CARD. A PROMPT RESPONSE WILL GREATLY FACILITATE ARRANGEMENTS FOR THE ANNUAL MEETING AND

YOUR COOPERATION WILL BE APPRECIATED. STOCKHOLDERS OF RECORD WHO ATTEND THE ANNUAL MEETING MAY VOTE THEIR SHARES PERSONALLY EVEN THOUGH THEY HAVE SUBMITTED A PROXY PREVIOUSLY.

THIS PROXY CARD IS VALID ONLY WHEN SIGNED AND DATED. KEEP THIS PORTION FOR YOUR RECORDS DETACH AND RETURN THIS PORTION ONLY TO VOTE, MARK BLOCKS BELOW IN BLUE OR BLACK INK AS FOLLOWS: Signature [PLEASE SIGN WITHIN BOX] Date Signature (Joint Owners) Date To withhold authority to vote for any individual nominee(s), mark "For All Except" and write the number(s) of the nominee(s) on the line below. 0 0 0 0 0 0 0 0 0 0 0000378825_1 R1.0.1.17 For Withhold For All All All Except The Board of Directors recommends you vote FOR the following: 1. Election of Directors Nominees 01 Michael P. Bailey 02 Kenneth M. Bate 03 Anthony B. Evin 04 John H. Johnson 05 Robert C. Young AVEO PHARMACEUTICALS, INC. ONE BROADWAY 14TH FLOOR CAMBRIDGE, MA 02142 VOTE BY INTERNET - www.proxyvote.com Use the Internet to transmit your voting instructions and for electronic delivery of information up until 11:59 P.M. Eastern Time on June 17, 2018. Have your proxy card in hand when you access the web site and follow the instructions to obtain your records and to create an electronic voting instruction form. ELECTRONIC DELIVERY OF FUTURE PROXY MATERIALS If you would like to reduce the costs incurred by our company in mailing proxy materials, you can consent to receiving all future proxy statements, proxy cards and annual reports electronically via e-mail or the Internet. To sign up for electronic delivery, please follow the instructions above to vote using the Internet and, when prompted, indicate that you agree to receive or access proxy materials electronically in future years. VOTE BY PHONE - 1-800-690-6903 Use any touch-tone telephone to transmit your voting instructions up until 11:59 P.M. Eastern Time on June 17, 2018. Have your proxy card in hand when you call and then follow the instructions. VOTE BY MAIL Mark, sign and date your proxy card and return it in the postage-paid envelope we have provided or return it to Vote Processing, c/o Broadridge, 51 Mercedes Way, Edgewood, NY 11717. The Board of Directors recommends you vote FOR proposals 2. and 3. For Against Abstain 2. To approve a non-binding advisory vote on executive compensation. 3. To ratify the appointment of Ernst & Young LLP as our independent registered public accounting firm for the year ending December 31, 2018. NOTE: In their discretion, the proxies are authorized to vote upon such other business as may properly come before the meeting or any adjournment thereof. Please sign exactly as your name(s) appear(s) hereon. When signing as attorney, executor, administrator, or other fiduciary, please give full title as such. Joint owners should each sign personally. All holders must sign. If a corporation or partnership, please sign in full corporate or partnership name, by authorized officer. Yes No Please indicate if you plan to attend this meeting

0000378825_2 R1.0.1.17 Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting: The Notice & Proxy Statement, Form 10-K are available at www.proxyvote.com AVEO PHARMACEUTICALS, INC. Annual Meeting of Stockholders June 18, 2018 10:00 AM EDT This proxy is solicited by the Board of Directors The undersigned hereby appoints Michael Bailey and Matthew Dallas or any of them, as proxies, each with the power to appoint their substitute, and hereby authorizes them to represent and to vote, as designated on the reverse side of this ballot, all of the shares of Common Stock of AVEO PHARMACEUTICALS, INC. that the stockholder(s) is/are entitled to vote at the Annual Meeting of Stockholders to be held at 10:00 AM, Eastern Daylight Time on June 18, 2018, at One Broadway, 5th Floor, Cambridge, MA 02142, and any adjournment or postponement thereof. For directions to our Annual Meeting of Stockholders, please visit our website at www.aveooncology.com. Unless submitting a proxy for these shares over the internet or by telephone, please mark, sign, date and return this proxy card promptly in the enclosed reply envelope. This proxy, when properly executed, will be voted in the manner directed herein. If no such direction is made, this proxy will be voted in accordance with the recommendations of our Board of Directors. If no direction is made to withhold authority to vote for an individual nominee (or all nominees), this proxy will be voted in favor of each nominee for which no such direction is made. Continued and to be signed on reverse side